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TRANSITION PROBABILITY FROM THE GROUND TO THE FIRST-EXCITED 2^+ STATE OF EVEN–EVEN NUCLIDES*

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Adopted values for the reduced electric quadrupole transition probability, $B(E2)\uparrow$, from the ground state to the first-excited 2^+ state of even–even nuclides are given in Table I. Values of τ, the mean life of the 2^+ state; E, the energy; and β, the quadrupole deformation parameter, are also listed there. The ratio of β to the value expected from the single-particle model is presented. The intrinsic quadrupole moment, Q_0, is deduced from the $B(E2)\uparrow$ value. The product $E \times B(E2)\uparrow$ is expressed as a percentage of the energy-weighted total and isoscalar $E2$ sum-rule strengths.

Table II presents the data on which Table I is based, namely the experimental results for $B(E2)\uparrow$ values with quoted uncertainties. Information is also given on the quantity measured and the method used. The literature has been covered to November 2000.

The adopted $B(E2)\uparrow$ values are compared in Table III with the values given by systematics and by various theoretical models. Predictions of unmeasured $B(E2)\uparrow$ values are also given in Table III.

Data files associated with this article may be found on IDEAL at http://www.idealibrary.com/links/doi/10.1006/adnd.2001.0858/dat.

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CONTENTS

INTRODUCTION

We have collected experimental results for the reduced electric quadrupole transition probability, $B(E2)\uparrow$, between the 0^+ ground state and the first 2^+ state in even–even nuclides. The first-excited state in the even–even nuclides is 2^+ except for ^{14}C, ^{14}O, ^{16}O, ^{40}Ca, ^{68}Ni, ^{72}Ge, ^{90}Zr, ^{96}Zr, ^{98}Zr, ^{98}Mo, ^{146}Gd, ^{182}Hg, ^{186}Pb, ^{188}Pb, ^{190}Pb, ^{192}Pb, ^{194}Pb, and ^{208}Pb. These $B(E2)\uparrow$ values represent basic nuclear information complementary to our knowledge of the energies of low-lying levels in these nuclides. Generally larger than expected from the single-particle model, the $B(E2)\uparrow$ values emphasize the widespread occurrence of quadrupole distortions in nuclides.

Our adopted values are presented in Table I. We give the energy, E, of the first 2^+ state; the $B(E2)\uparrow$ value; and the mean lifetime, τ. Table I also gives values for the deformation parameter, β; the ratio of this β to the single-particle value, $\beta_{(sp)}$; and the intrinsic quadrupole moment, Q_0. The last two columns express the product $E \times B(E2)\uparrow$ as a percentage of the total and of the isoscalar $E2$ sum-rule strength.

Table II is a compilation of all data basic to the adopted values of Table I. The arrangement was chosen to allow easy comparison of the different $B(E2)\uparrow$ values for each nucleus so that interested persons are able to judge their probable accuracy.

Our starting point was a previous $B(E2)\uparrow$ compilation [1], published in 1987, which contained 1765 measured $B(E2)\uparrow$ values from 793 references and led to adopted energies of the first 2^+ states for 457 nuclides and adopted $B(E2)\uparrow$ values for 281 nuclides. The current compilation contains 1978 entries from 928 references leading to adopted $B(E2)\uparrow$ values for 328 nuclides. The energies of the first 2^+ state are now known for 557 nuclides.

In Table III, we have compared the adopted $B(E2)\uparrow$ values with those given by systematics and by various theoretical models. Such a comparison should be helpful in testing whether a newly measured $B(E2)\uparrow$ value is consistent with our current understanding of ground-state (quadrupole) deformations and in making reliable predictions for those nuclei lacking an experimental value. Selected quantities from Tables I and III are also shown in graphical form in Figs. I–IV.

Treatment of Data

Where several $B(E2)\uparrow$ values are available for a given nuclide, we have generally used weighting values that are inversely proportional to the quoted uncertainty rather than inversely proportional to the square of the quoted uncertainty, which would be the correct procedure if the uncertainties were purely statistical. We believe that our weighting procedure results in a more reliable average value. We did not, however, adhere religiously to the weighting procedure outlined above in all cases. Consideration of certain systematic differences in $B(E2)\uparrow$ values and some additional sources of systematic error were also blended into the process of obtaining adopted $B(E2)\uparrow$ values. Table II contains $B(E2)\uparrow$ values measured via high-energy inelastic electron scattering, Mössbauer spectroscopy, and muonic x-ray measurements in addition to those obtained by traditional methods (Coulomb excitation, lifetime measurements, and resonance fluorescence). However, our adopted $B(E2)\uparrow$ values are based only on the traditional types of measurements because these are more direct and involve essentially model-independent analyses.

When extracting $B(E2)\uparrow$ from a lifetime measurement (or vice versa), it is necessary to know the total internal conversion coefficient α. The α values employed in this compilation were generated with the computer code ICCDF [2], which incorporates the Dirac–Fock atomic model with exact consideration of the exchange interaction between atomic electrons as well as between these electrons and the free electron receding to infinity during the conversion process. The $B(E2)\uparrow$ and τ values are related through

$$\tau(1+\alpha) = \tau_\gamma = 40.81 \times 10^{13} E^{-5}[B(E2)\uparrow/\mathrm{e}^2\mathrm{b}^2]^{-1}, \quad (1)$$

where E is in units of keV, $B(E2)\uparrow$ in $\mathrm{e}^2\mathrm{b}^2$, and τ in ps. In this work, the theoretical α value calculated for a specific E value is considered exact.

In Ref. [1], we used Eq. (1) to convert a particular τ value to the corresponding $B(E2)\uparrow$ value. We then assigned to the $B(E2)\uparrow$ value the same percentage uncertainty as that of the τ value except that we folded in an additional uncertainty of 3% in α. In this work, we follow a different procedure. When converting a particular $\tau \pm \Delta\tau$ value to a $B(E2)\uparrow \pm \Delta B(E2)\uparrow$ value, we totally disregard the central τ value and consider instead the extremum values $\tau^+ = \tau + \Delta\tau$ and $\tau^- = \tau - \Delta\tau$. The larger $B(E2)\uparrow^+$ value is obtained using Eq. (1), E^+, τ^-, and α^- (corresponding to $E^+ = E + \Delta E$). Similarly, the smaller $B(E2)\uparrow^-$ value is obtained using Eq. (1), E^-, τ^+, and α^+ (corresponding to $E^- = E - \Delta E$). We then report the $B(E2)\uparrow$ value as $\frac{1}{2}[B(E2)\uparrow^+ + B(E2)\uparrow^-]$ and its uncertainty as either $\Delta B(E2)\uparrow = B(E2)\uparrow^+ - B(E2)\uparrow$ or $\Delta B(E2)\uparrow = B(E2)\uparrow - B(E2)\uparrow^-$. We believe that the latter procedure reflects more realistically the range of $B(E2)\uparrow$ value permitted by the $\tau \pm \Delta\tau$ value, particularly when the uncertainty in τ is large (say, >10%) or when the uncertainty in the τ value reported in the literature is asymmetric. We follow a similar procedure when converting $B(E2)\uparrow \pm \Delta B(E2)\uparrow$ to $\tau \pm \Delta\tau$.

Related Quantities

The $B(E2)\uparrow$ values are basic experimental quantities that do not depend on nuclear models. A quantity that, though model dependent, is quite useful because of its easy visualization is the deformation parameter, β. Assuming a uniform charge distribution out to the distance $R(\theta, \phi)$ and zero charge beyond, β is related to $B(E2)\uparrow$ by the formula

$$\beta = \left(4\pi/3ZR_0^2\right)[B(E2)\uparrow/\mathrm{e}^2]^{1/2}. \quad (2)$$

We use Eq. (2) to calculate all the β values listed in Table I. R_0 has been taken to be $1.2A^{1/3}$ fm. $B(E2)\uparrow$ is in units of e^2b^2.

A similar parameter, β_2, is widely used in the theory of the direct-interaction excitation of collective states to describe the deformation of the average potential. While the β values listed in Table I provide a useful guide to the values to be expected for this nuclear potential deformation parameter, the β and β_2 values can, in general, differ somewhat.

The relation (Eq. (2)) of β to $B(E2)\uparrow$ is useful because it has rather direct physical significance. However, as an indication of the presence of collective quadrupole effects in nuclei, the value of β is less useful because it includes effects, predicted by the single-particle model, which vary with the size of the nucleus (larger values for light nuclei). Therefore, as an indication of collective quadrupole motion in nuclei, we have calculated the ratio $\beta/\beta_{(sp)}$. The quantity $\beta_{(sp)}$ is assumed to be $1.59/Z$, which follows from using the single-particle value $B(E2)\uparrow_{(sp)}$ in Eq. (2). This (Weisskopf) single-particle $B(E2)\uparrow$ value is given by

$$B(E2)\uparrow_{(sp)} = 2.97 \times 10^{-5} A^{4/3}\ e^2b^2. \qquad (3)$$

The energy-weighted sum-rule (EWSR) strength, on the other hand, tells us how much total transition strength we can expect in a particular nucleus. It is given by [3]

$$S(\mathrm{I}) = \sum E \times B(E2)\uparrow\ = 30\, e^2(\hbar^2/8\pi m)AR_0^2, \qquad (4)$$

where m is the nucleon mass and $(3/5)R_0^2$ is used for the single-particle, mean-square radius. The isoscalar part of the full sum is given by [4]

$$S(\mathrm{II}) = S(\mathrm{I})(Z/A)^2. \qquad (5)$$

In the final two columns of Table I, we express the quantity $E \times B(E2)\uparrow$ for just the first 2^+ state as a percentage of S(I) and S(II).

Database

The $B(E2)\uparrow$ database (see Table II) comprises a total of 1978 measurements for 328 nuclides. Tables A–C summarize the time spans during which the measurements were made, the experimental method used, and the levels of accuracy attained. The overall trends of the adopted 2_1^+ energies and $B(E2)\uparrow$ values are shown in Fig. A.

The measured $B(E2)\uparrow$ or τ values were extracted from 928 references, of which 831 are primary sources (standard physics journals) and 97 are secondary sources (abstracts, conference proceedings, theses, unpublished reports, etc.). Of the 328 adopted $B(E2)\uparrow$ values, 248 are based on multiple measurements, while 80 values are based on just a single measurement in each case. In the latter group, the adopted values for ^{88}Zr, ^{116}Pd, ^{104}Cd, ^{134}Xe, ^{140}Xe, ^{136}Ce, ^{152}Dy, and ^{218}Ra are from secondary sources that date back, on the average, to more than 15 years.

The $B(E2)\uparrow$ values given by systematics and by various theoretical models are listed in Table III and compared with the adopted values.

TABLE A
Time Spans during Which the Measurements Listed in Table II Were Made and Reported

Time span	Number of measurements	Number of references
Before 1956	27	17
1956–1960	238	48
1961–1965	273	117
1966–1970	390	187
1971–1975	448	222
1976–1980	268	132
1981–1985	102	66
1986–1990	109	66
1991–1995	69	45
1996–2000	54	28
Totals	1978	928

Global Best Fit (GLOBAL)

According to the global systematics, a knowledge of the energy E(keV) of the 2_1^+ state is all that is required to make a prediction for the corresponding τ_γ (ps) and, hence, the $B(E2)\uparrow$ (e^2b^2) value. Within the framework of the hydrodynamic model with irrotational flow, Bohr and Mottelson [5–7] have derived simple expressions for the τ_γ

TABLE B
Methods Used in Obtaining the Measured Values of Table II

Method	Number of measurements
Coulomb excitation with detection of the emitted γ-rays or conversion electrons	522
Coulomb excitation with detection of inelastically scattered particles	339
Lifetime measurements (delayed coincidence, Doppler shift, pulsed beam, and recoil distance)	812
Electron scattering	153
Mössbauer	7
Muonic x-ray	24
Resonance fluorescence	121
Total	1978

TABLE C
Levels of Accuracy Reflected in the Adopted Values of Table I

Accuracy %	Number of nuclides Ref. [1]	This work
<2	51	56
≥2–<5	83	87
≥5–<10	72	82
≥10–<25	57	75
≥25	18	28
Totals	281	328

values. They derived

$$\tau_\gamma \approx 0.6 \times 10^{14} E^{-4} Z^{-2} A^{1/3} \tag{6}$$

for small harmonic vibrations of spherical nuclei and

$$\tau_\gamma \approx 1.4 \times 10^{14} E^{-4} Z^{-2} A^{1/3} \tag{7}$$

for collective rotations of axially symmetric nuclei. The $E^{-4}Z^{-2}$ dependence in the above expressions was adopted by Grodzins [8] in his empirical fits (for all even–even nuclei), but he replaced $A^{1/3}$ with A. When the exponents of E and A were *allowed to vary*, we found earlier [9, 10] that the best global fit to the data of Ref. [1] was obtained with

$$\tau_\gamma = 1.25 \times 10^{14} E^{-4.0} Z^{-2} A^{0.69}. \tag{8}$$

When converted to $B(E2)\uparrow$, this expression led to

$$B(E2)\uparrow\ = 3.26 E^{-1.0} Z^2 A^{-0.69}. \tag{9}$$

We also showed (see Figs. 1.1, 1.2, and 1.3 of Ref. [10]) that the $1/E$ dependence is more important than the exact A dependence. If the exponent of A is fixed as $-\frac{2}{3}$ (instead of -0.69), the revised best fit to the data of Ref. [1] was found [11] to be

$$B(E2)\uparrow\ = 2.6 E^{-1} Z^2 A^{-2/3}. \tag{10}$$

Having established the functional relationship that exists between E and A on the one hand and between E and τ_γ on the other, we now find that the current adopted τ_γ values, excluding those for closed-shell nuclei, lead to

$$\tau_\gamma = (1.59 \pm 0.28) \times 10^{14} E^{-4} Z^{-2} A^{2/3}. \tag{11}$$

Using Eqs. (1) and (2), the corresponding $B(E2)\uparrow$ and β predictions are given by

$$B(E2)\uparrow\ = (2.57 \pm 0.45) E^{-1} Z^2 A^{-2/3} \tag{12}$$

and

$$\beta = (466 \pm 41) E^{-1/2} A^{-1}. \tag{13}$$

Even though the absolute "global best fit" $B(E2)\uparrow$ predictions differ somewhat from the measured values (see

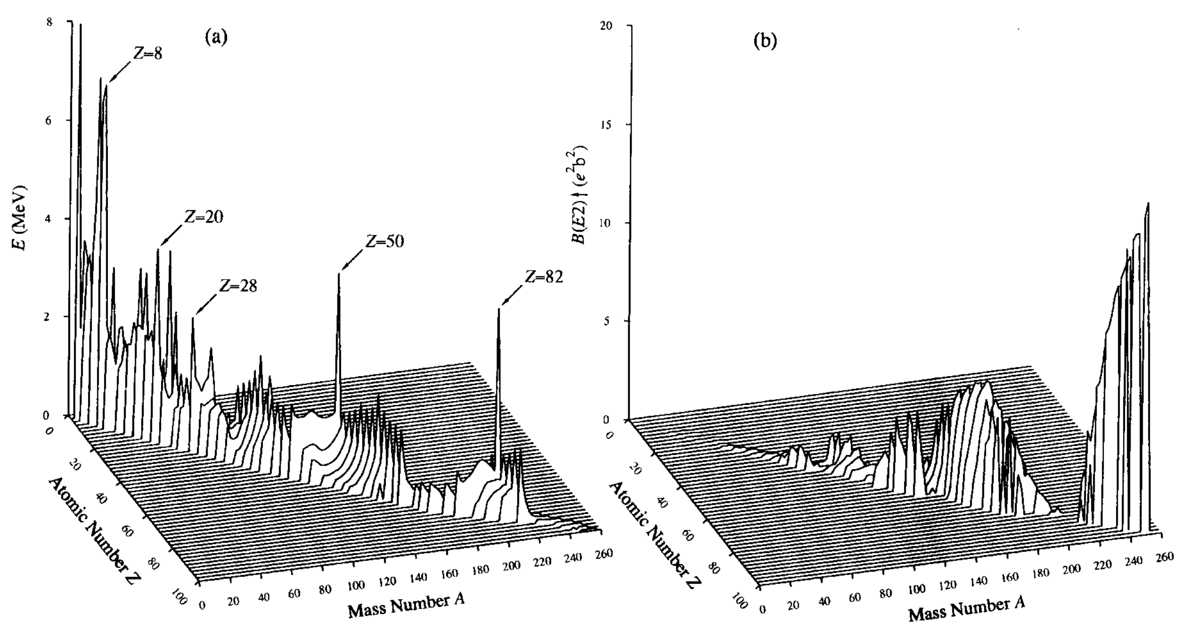

FIG. A. (a) Energies of the first-excited 2^+ states in even–even nuclei and (b) their corresponding reduced electric quadrupole transition probability $B(E2)\uparrow$ values. This figure is based on the adopted values of Table I.

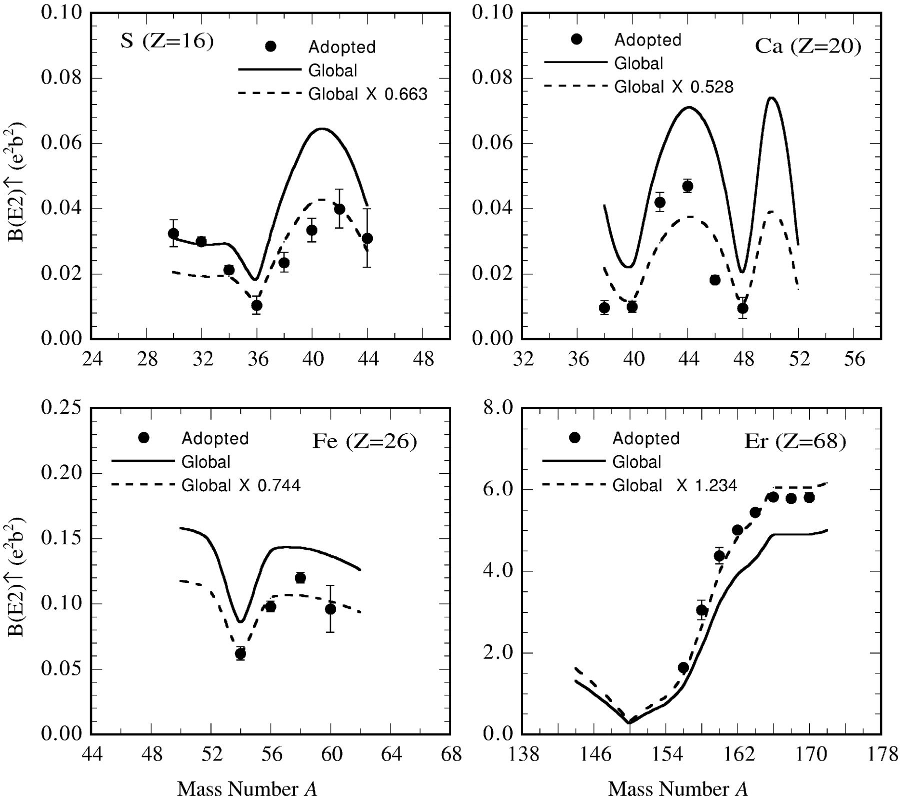

FIG. B. Comparison between the measured $B(E2)\uparrow$ values and "global best fit" predictions for selected isotopes. A simple renormalization noticeably improves the agreement between the measured and predicted values.

Fig. B for selected isotopes), a simple renormalization often brings the predictions in better agreement with the measurements. The "global best fit" values (Eq. (12)) are given in Table III.

Theoretical Predictions

Single-Shell Asymptotic Nilsson Model (SSANM)

One of the simplest theoretical models for understanding the $B(E2)\uparrow$ trends is the SSANM, which is based on the ansatz, "A nucleus is as deformed as it can be in a single shell." This model has been discussed at some length in previous papers [11–13]. If the deformation of a nucleus, and hence of the Nilsson potential, is large, the differences in the energies of the spherical single-particle states may be ignored and the deformed single-particle states become, to a good approximation for axially symmetric quadrupole deformation, eigenstates of the quadrupole moment operator. The eigenvalues for these eigenstates are just the mass quadrupole moments of the deformed single-particle states. For a nucleus with prolate deformation, the intrinsic state with the largest mass quadrupole moment is formed by sequentially putting valence nucleons (consistent with the Pauli principle) in the asymptotic Nilsson states with decreasing moments. In the version of the SSANM that was developed in Refs. [12] and [13], the $B(E2)\uparrow$ values (in units of e^2b^2) are given by

$$B(E2)\uparrow = \frac{5}{16\pi}|eQ_0|^2 \quad (Q_0 \neq 0)\,, \tag{14}$$

$$= (1.02 \times 10^{-5})A^{2/3}\left[e_\pi Q_\pi^\upsilon + e_\nu Q_\nu^\upsilon\right]^2, \tag{15}$$

where the mass quadrupole moments Q_π^υ (Q_ν^υ) of the valence (υ) protons (neutrons) are in units of the oscillator size parameter $\alpha^2 = \hbar/m\omega = 0.0101A^{1/3}$ b, and the proton (neutron) effective charges e_π (e_ν) are

$$e_\pi = [1 + (Z/A)]\,e \quad \text{and} \quad e_\nu = 2.1(Z/A)e. \tag{16}$$

The mass quadrupole moments are listed in Table D, and all nuclei are assumed to be prolate. The SSANM $B(E2)\uparrow$ values are given in Table III.

Finite-Range Droplet Model (FRDM)

In the FRDM [14] the nuclear ground-state shapes are calculated by minimizing the nuclear potential energy function with respect to ε_2, ε_3, ε_4, and ε_6 shape degrees of freedom in Nilsson's perturbed-spheroid parametrization. The nuclear potential energy of deformation is calculated by use of

TABLE D
Mass Quadrupole Moments Q_π^υ (Q_ν^υ) for Increasing Number $\mathcal{N}_\pi$ ($\mathcal{N}_\nu$) of Valence (υ) Protons (Neutrons) in Various Shells

$\mathcal{N}_\pi^\upsilon$ or $\mathcal{N}_\nu^\upsilon$	28–50	50–82	82–126	126–184
0	0	0	0	0
2	10.129	14.758	19.192	23.484
4	15.463	22.456	31.538	40.302
6	19.463	29.498	43.334	56.716
8	22.266	35.862	50.720	66.798
10	24.434	41.134	57.180	76.002
12	25.768	44.224	62.586	85.100
14	23.102	44.700	67.202	93.500
16	18.361	44.518	71.688	101.10
18	13.218	44.188	76.056	107.10
20	8	43.804	77.902	110.70
22	0	39.258	76.110	113.86
24		32.308	74.264	115.97
26		24.976	71.584	117.89
28		17.516	68.868	119.69
30		10	65.998	120.09
32		0	59.538	116.49
34			50.436	112.48
36			40.982	107.54
38			31.376	102.60
40			21.708	97.432
42			12	92.244
44			0	83.844
46				72.628
48				61.090
50				49.390
52				37.634
54				25.822
56				14
58				0

Note. The listed values are in units of the oscillator size parameter, $\alpha^2 = \hbar/m\omega = 0.0101A^{1/3}$ b.

the macroscopic–microscopic method [15], with the macroscopic contribution calculated from a finite-range droplet model and the microscopic shell and pairing corrections from a folded-Yukawa single-particle potential. Strutinsky's method [16–18] is used for the shell correction, and the Lipkin–Nogami [19–21] extension of the Bardeen–Cooper–Schrieffer (BCS) method for the pairing correction. The β_2 and β_4 values given by this model for ~9000 nuclei have become available [22]. The $B(E2)\uparrow$ values are deduced from the β_2 and β_4 values using the equation [23]

$$Q_0 = ZR_0^2 \frac{3}{\sqrt{5\pi}}\left(\beta_2 + \frac{2}{7}\sqrt{5/\pi}\,\beta_2^2 + \frac{20}{77}\sqrt{5/\pi}\,\beta_4^2 + \frac{12}{7\sqrt{\pi}}\beta_2\beta_4\right) + O(\beta^3) \quad (17)$$

and Eq. (14).

In the FRDM and in several other models listed below, the minimization procedure occasionally yields several solutions (prolate and oblate) with different equilibrium deformations and similar binding energies. Therefore, the theoretical values listed in Table III should not be used uncritically. Meanwhile, they do provide a useful guide as to the general trend of the $B(E2)\uparrow$ values according to different models.

Woods–Saxon Model (WSM)

In this model [24] the nuclear ground-state shapes are calculated using Strutinsky's shell-correction method [16–18]. The macroscopic part of the total energy is assumed to be given by the Yukawa-plus-exponential mass formula [15], and the shell correction is computed using the axially deformed, single-particle Woods–Saxon potential [24] with parameters from Ref. [25]. The total energy is minimized with respect to the shape parameters β_2, β_4, and β_6. As in the case of the FRDM, an approximate particle number projection is implemented by means of the Lipkin–Nogami method [19–21] with pairing strengths from Ref. [14] to evaluate the pairing correction term. The calculated β_2 and β_4 values for ~1400 even–even nuclei using this model have become available [26], and the deduced $B(E2)\uparrow$ values (using Eqs. (14) and (17)) are given here in Table III.

Relativistic Mean-Field (RMF) Calculations

The basic ingredients of the RMF [27, 28] approach are baryons and mesons. In the current version, the mesons used are the scalar σ, vector ω, and isovector–vector ρ. The Lagrangian density is constructed with these basic degrees of freedom, and the equations of motion are derived using the variational ansatz. This procedure results in the Dirac equation for the baryons and the Klein–Gordon equations for the mesons and for the photons with source terms. Charge conservation and time-reversal symmetry are used to reduce the number of equations to be solved self-consistently. The basis expansion method [29] is used to solve the resulting equations of motion. The large and small components of the Dirac spinors and meson fields are expanded in terms of the eigenfunctions of the deformed axially symmetric oscillator potential. The pairing interaction, known to be important for open-shell nuclei, is solved using the constant gap approximation [30]. The vector meson exchange generates the spin-orbit interaction in a self-consistent way. The strength of this interaction relative to the central potential determines the sequence and spacing of the single-particle states. In most other approaches (Hartree–Fock (HF), for instance) this strength is determined from the known spin-orbit splitting. The ground-state properties (including the quadrupole moments) of 1315 even–even nuclei calculated in the RMF framework have been published recently [31]. The $B(E2)\uparrow$ values deduced from the published Q_0 values (using Eq. (14)) are given here in Table III.

Extended Thomas–Fermi Strutinsky–Integral (ETFSI) Method

In this method, axial and left–right symmetries are assumed, and the deformations are expressed in terms of the (β_2, β_4) coefficients of a multipole expansion of a surface of constant density. The calculations are performed using the ETFSI approximation [32–35] to the HF method for Skyrme-type forces, an approximation which consists in first making the extended Thomas–Fermi (ETF) approximation to the HF method and then adding Strutinsky shell corrections in the integral form (SI), along with BCS pairing corrections based on a δ-function force. The ETFSI approximation is equivalent to the HF method in the sense that, when the underlying force is fitted to the same data by one method or the other, the two methods give very similar extrapolations out to the neutron drip line, the disagreement for total masses being <1 MeV. The deformation parameters minimize the total energy (after projecting out the spurious rotational energy) as computed with the parametrization SkSC4 of the Skyrme force. This force, which has just eight active parameters, fits the $\sim$1500 known masses in the $36 \leq A \leq 300$ interval with a root-mean-square error of $\sim$740 keV. Using the ETFSI method, the ground-state deformations of $\sim$7000 nuclei with $10 \leq Z \leq 130$ and $36 \leq A \leq 300$ have been calculated recently [36]. The deduced $B(E2)\uparrow$ values (using Eqs. (14) and (17)) are given here in Table III.

Hartree–Fock + BCS Calculations with Skyrme SIII Force [HF + BCS(SIII)]

In these calculations, the nuclear ground-state wave functions are obtained in the framework of the HF plus BCS method [37, 38]. The Skyrme SIII force is used to construct the HF potential, while the seniority force is chosen as the pairing interaction, whose strength is determined such that the empirical average gap $12A^{-1/3}$ MeV is reproduced with the Thomas-Fermi level density. The single-particle wave functions are expressed on a Cartesian mesh of size 1 fm. The number of mesh points is $13 \times 13 \times 14$. An octant of a nucleus is placed in a corner of this box, imposing reflection symmetries (D_{2h}). Total binding energies are corrected for error due to finite mesh size. The results for $\sim$880 nuclei using this model have become available [39], and the $B(E2)\uparrow$ values deduced from the Q_0 values (using Eq. (14)) are given here in Table III.

Hartree–Fock + BCS Calculations with Skyrme MSk7 Force [HF + BCS(MSk7)]

In this approach, the ground-state properties are determined in the framework of the conventional HF plus BCS model based on the Skyrme force [40, 41]. The nuclear ground-state wave function is expressed in terms of an expansion of the single-particle functions in a harmonic-oscillator basis. The MSk7 force used [41] is a 10-parameter Skyrme force, along with a 4-parameter, δ-function pairing force. The Skyrme and pairing parameters are determined by fitting to the full data set (1888 values) of $A \geq 36$ masses. Both spherical and deformed nuclei are included, but the $N = Z$, $Z \pm 1$ nuclei, subject to Wigner-term anomalies, are not included. In the description of deformed nuclei, axial and left-right symmetries are assumed. The deformation parameters given by the ETFSI-2 model [42] are taken as the starting values in the deformed HF calculations. The spurious rotational energy of deformed nuclei [40] is subtracted from the total computed energy. The $B(E2)\uparrow$ values deduced from the calculated Q_0 values provided by the authors (using Eq. (14)) are given here in Table III.

Dynamical Microscopic Model (DMM)

This model is based on the generator coordinate method (GCM) with Gaussian overlap approximation [43, 44]. The potential energy of a nucleus is calculated by the shell-correction method of Strutinsky (see Ref. [15]) with liquid-droplet macroscopic part and zero-point energy. The modified Nilsson single-particle potential is used. The GCM collective Hamiltonian in the two-dimensional (β_2, β_4) space is diagonalized in the harmonic oscillator basis. The mean-square radii and electric quadrupole moments of $\sim$880 nuclei in the $20 \leq Z \leq 98$ region have been calculated [45]. The deduced $B(E2)\uparrow$ values (using Eq. (14)) are generally lower than the data, but the authors argue that the static estimates given by the mean-field calculations are underestimates and should be supplemented by contributions arising from dynamical effects.

Graphs

The adopted values from Table I are shown graphically in Figs. I–III as functions of *A*, *Z*, and *N*. The square of the quantity $\beta/\beta_{(sp)}$ (see Figs. Ic, IIc, and IIIc) is the enhancement factor, $B(E2)\uparrow/B(E2)\uparrow_{(sp)}$. Although the transitions to the

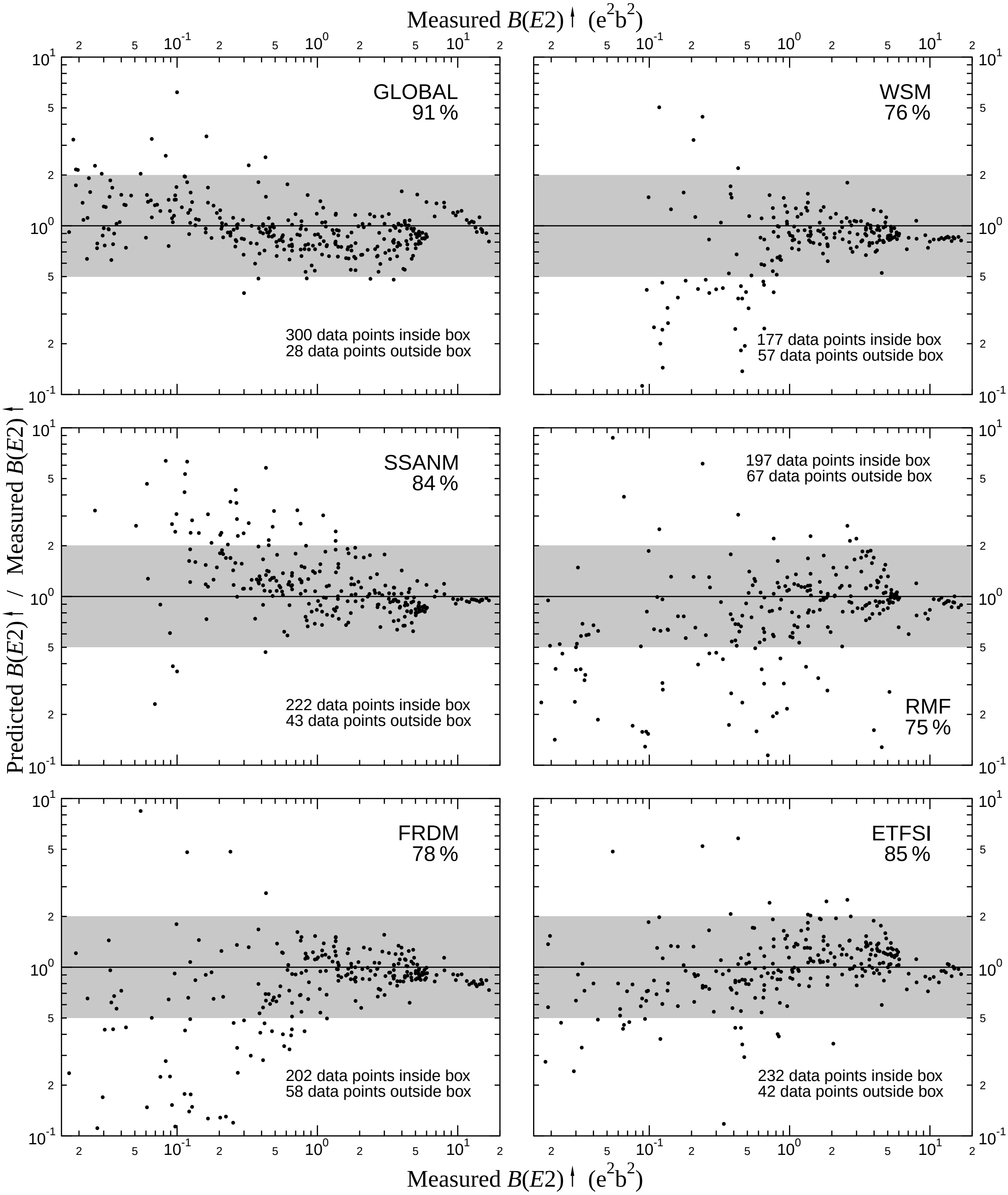

FIG. C. Comparison between the measured $B(E2)\uparrow$ values and various theoretical predictions. The values inside the shaded region agree within a factor two. The percentage of values lying within the region of agreement is indicated in each plot.

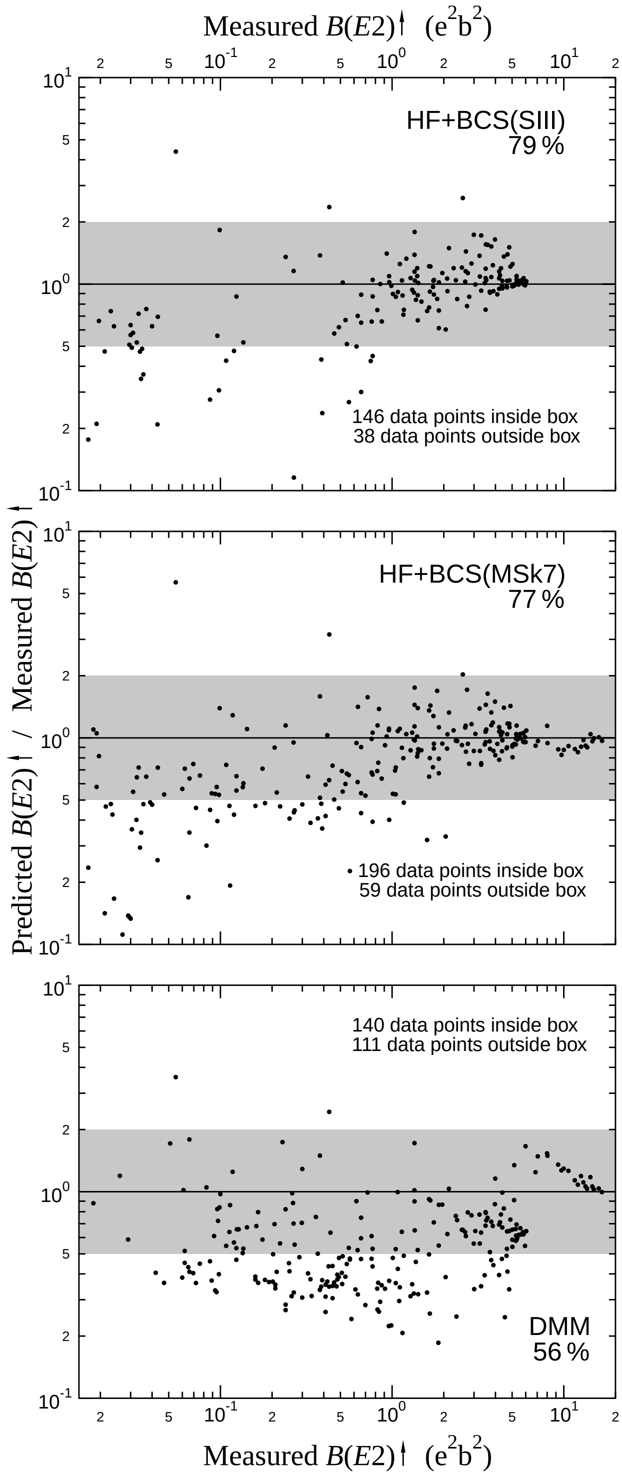

FIG. C—*Continued*

first 2^+ states show enhancement factors 10 to 200 times larger than expected for a single particle, they exhaust only 5%–20% or so of the energy-weighted isoscalar sum-rule strength (see Figs. Id, IId, and IIId). Adding in the strengths for other 2^+ states seldom does more than about double this value. The missing strength is usually found in the giant quadrupole resonance.

Equations (12) and (5) lead to the global prediction that the quantity $E \times B(E2)\uparrow$ for just the 2_1^+ states expressed as a percentage of the EWSR becomes simply $(36 \pm 6)A^{-1/3}$ as shown in Fig. 1d. Our empirical estimate is in excellent agreement with the estimate $\approx 40A^{-1/3}$ made by Bohr and Mottelson [46] on more general grounds.

The $B(E2)\uparrow$ values (see Table III) predicted by the different theoretical models are compared graphically in Fig. IV. Also shown are the measured $B(E2)\uparrow$ values and their uncertainties from Table I. In terms of the levels of agreement between experiment and model predictions, our analysis (see Fig. C) shows four groupings: (i) excellent agreement (91%) with GLOBAL, (ii) very good agreement (~85% each) with SSANM and ETFSI, (iii) good agreement (in the 75%–79% range) with FRDM, WSM, RMF, HF + BCS(SIII), and HF + BCS(MSk7), and (iv) reasonable agreement (56%) with DMM. All models, except GLOBAL and SSANM, also predict other ground-state properties (masses, radii, etc.) with varying degrees of success.

Acknowledgments

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EXPLANATION OF FIGURES

FIGURE I. **Summary of Various Adopted Quantities as a Function of Mass Number *A***

FIGURE II. **Summary of Various Adopted Quantities as a Function of Proton Number *Z***

FIGURE III. **Summary of Various Adopted Quantities as a Function of Neutron Number *N***

The four parts of Figs. I, II, and III consist of the following: (a) energies of the first-excited 2^+ state in even–even nuclides (column 2 of Table I), (b) $B(E2)\uparrow$ values (column 3 of Table I), (c) $\beta/\beta_{(sp)}$ values (column 6 of Table I), and (d) $E \times B(E2)\uparrow$ values expressed as a percentage of the isoscalar sum-rule strength (last column of Table I). In these figures, quantities belonging to different isotopes (isotones) are connected by lines. The vertical arrows show the positions of magic proton or neutron numbers. In Figs. Ia, IIa, and IIIa, closed circles indicate nuclei for which both $E(2_1^+)$ and $B(E2)\uparrow$ values are known and open circles those for which only $E(2_1^+)$ values are known.

FIGURE IV. **Summary of Graphs of $B(E2)\uparrow$ Predictions for Beryllium to Fermium Isotopes**

These figures are based on the adopted values listed in Table I and the theoretical predictions from Table III, as described in the text.

EXPLANATION OF TABLES

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

Throughout this table, italicized numbers refer to the uncertainties in the last digits of the quoted values.

Nuclide — The even Z, even N nuclide studied

E(level) — Energy of the first excited 2^+ state in keV either from a compilation or from current literature

$B(E2)\uparrow$ — Reduced electric quadrupole transition rate for the ground state to 2^+ state transition in units of e^2b^2

τ — Mean lifetime of the state in ps

$\tau = 40.81 \times 10^{13} E^{-5}[B(E2)\uparrow/e^2b^2]^{-1}(1+\alpha)^{-1}$ (see Table II for the α values when $\alpha > 0.001$)

β — Deformation parameter

$$\beta = \left(4\pi/3ZR_0^2\right)[B(E2)\uparrow/e^2]^{1/2}, \text{ where}$$
$$R_0^2 = (1.2 \times 10^{-13} A^{1/3}\ \text{cm})^2 = 0.0144 A^{2/3}\ \text{b}$$

$\beta_{(sp)}$ — β from the single-particle model

$$\beta_{(sp)} = 1.59/Z$$

Q_0 — Intrinsic quadrupole moment in b

$$Q_0 = \left[\frac{16\pi}{5}\ \frac{B(E2)\uparrow}{e^2}\right]^{1/2}$$

EWSR(I) — $E \times B(E2)\uparrow$ expressed as a percentage of S(I) (see Eq. (4) with proton mass used for m)
$S(\text{I}) = 30e^2(\hbar^2/8\pi m)AR_0^2 = 7.13A^{5/3}$ keV $\cdot\, e^2b^2$ (S(I) is the (nearly) model-independent sum-rule $E2$ strength)

EWSR(II) — $E \times B(E2)\uparrow$ expressed as a percentage of S(II)
$S(\text{II}) = S(\text{I})(Z/A)^2$ (S(II) is the sum-rule isoscalar $E2$ strength)

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

Throughout this table, italicized numbers refer to the uncertainties in the last digits of the quoted values.

Each set of measurments is preceded by the symbol of the even Z, even N nuclide studied. For each nuclide, the energy of the first excited state is given as in Table I. The value of the total internal conversion coefficient α is also given if $\alpha > 0.001$.

$B(E2)\uparrow$ — Reduced electric quadrupole transition rate for the ground state to 2^+ state transition in units of e^2b^2

τ — Mean lifetime of the state in ps

$$\tau = 40.81 \times 10^{13} E^{-5}[B(E2)\uparrow/e^2b^2]^{-1}(1+\alpha)^{-1}$$

Method — Method employed in the measurement

ADOPTED VALUE	This line lists the adopted values of $B(E2)\uparrow$ and τ from Table I
Coul Ex (x, x′)	Coulomb excitation with detection of inelastically scattered particle
Coul Ex (x,x′γ)	Coulomb excitation with detection of emitted γ ray
Coul Ex Ce(K)	Coulomb excitation with detection of the emitted K conversion electrons
Coul Ex Ce(L)	Coulomb excitation with detection of the emitted L conversion electrons
Delayed Coinc	Observation, with fast electronics, of the delay between transitions in a cascade
Doppler Shift	Analysis of Doppler-broadened lineshapes
Electron Scatt	Measurement of the longitudinal part of the form factor in high-energy inelastic electron scattering
Mossbauer	Measurement of the hyperfine splitting
Muonic X-ray	Measurement of the hyperfine splitting of muonic atoms

EXPLANATION OF TABLES continued

Pulsed Beam	Pulsed beam excitation followed by observation of delayed emission with fast electronics
Recoil Dist	Measurement as a function of distance of the relative fraction of recoil nuclei which decay in a movable plunger
Reson Fluor	Measurement of the nuclear resonance fluorescence cross section

Some general references for the above methods are as follows: Coulomb excitation—Alder and Winther [47], McGowan and Stelson [48], and Newton [49]; lifetime measurements—Fossan and Warburton [50], Löbner [51], Allen [52], and Alexander and Forster [53]; resonance fluorescence—Skorka [54]; electron scattering—Überall [55] and Theissen [56]; Mössbauer—Kienle [57]; and muonic x-ray—Hüfner, Scheck, and Wu [58].

Reference	Reference key numbers. The references themselves are listed after the tables in chronological order. A key number is a coded designation for the reference. For example, in 1950Mc79, 1950 is the year the article was published, Mc represents the last name of the paper's first author (McGowan), and 79 is a running number. Secondary sources have a different designation in which the running number is replaced by two running letters (for example, 1961KeZZ).

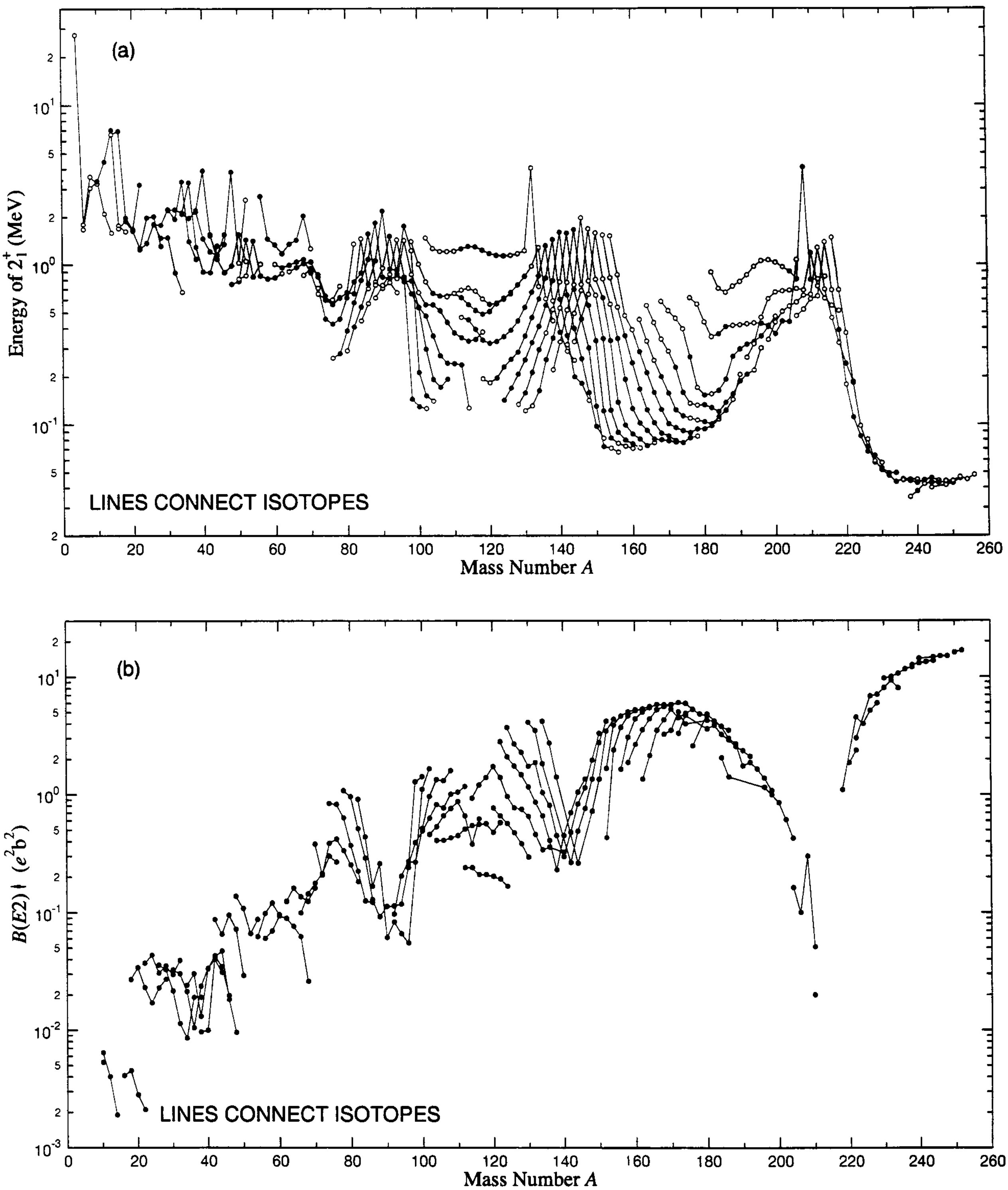
TABLE III. Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

Throughout this table, italicized numbers refer to the uncertainties in the last digits of the quoted values. The symbol "sph." stands for a spherical nucleus and denotes that the calculated $B(E2)\uparrow$ value is <0.001.

Nuclide	The even Z, even N nuclide studied.
E(level)	Energy of the first-excited 2^+ state in keV, rounded to 1 keV
Adopted Value	Adopted $B(E2)\uparrow$ value from Table I
Global Best Fit	$B(E2)\uparrow$ from Eqs. (1) and (11) [see also Eq. (12)]
SSANM	Predicted $B(E2)\uparrow$ from single-shell asymptotic Nilsson model
FRDM	Predicted $B(E2)\uparrow$ from finite-range droplet model
WSM	Predicted $B(E2)\uparrow$ from Woods–Saxon model
RMF	Predicted $B(E2)\uparrow$ from relativistic mean-field calculations
ETFSI	Predicted $B(E2)\uparrow$ from extended Thomas–Fermi Strutinsky-integral method
HF + BCS(SIII)	Predicted $B(E2)\uparrow$ from Hartree–Fock + BCS calculations with the Skyrme SIII force
HF + BCS(MSk7)	Predicted $B(E2)\uparrow$ from Hartree–Fock + BCS calculations with the Skyrme MSk7 force
DMM	Predicted $B(E2)\uparrow$ from dynamical microscopic model

FIGURE I. Summary of Various Adopted Quantities as a Function of Mass Number *A*

See page 13 for Explanation of Figures



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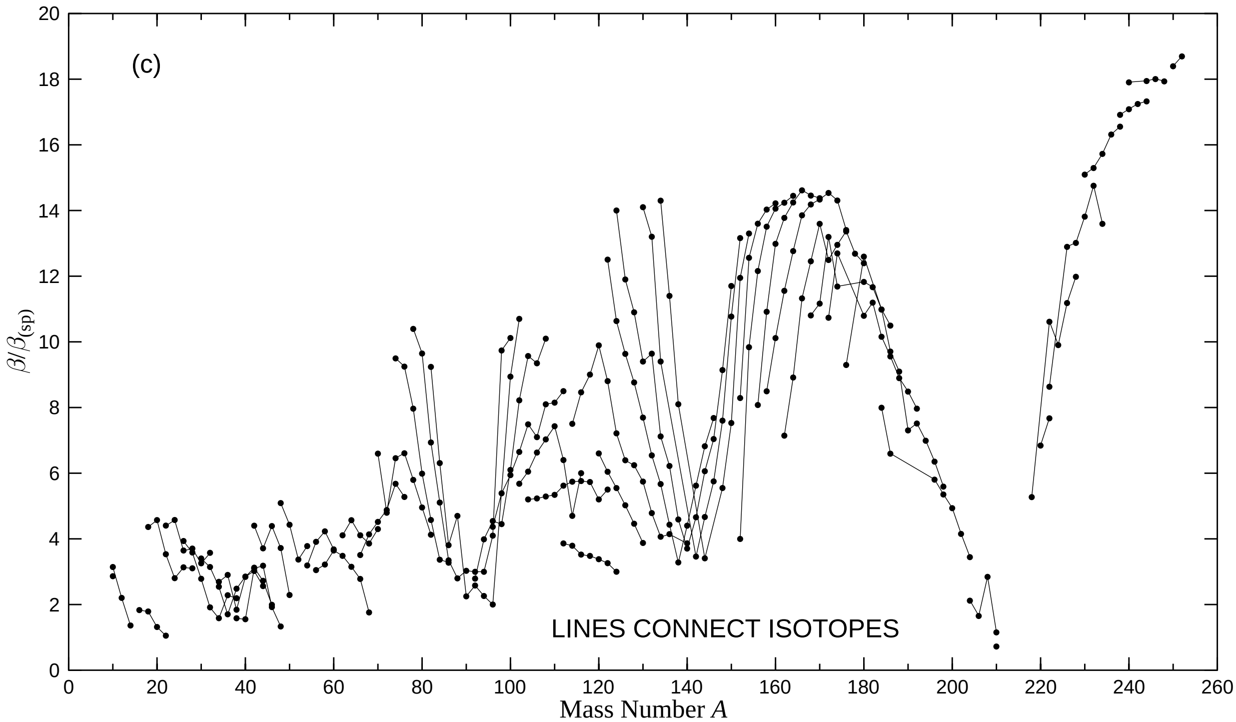
See page 13 for Explanation of Figures



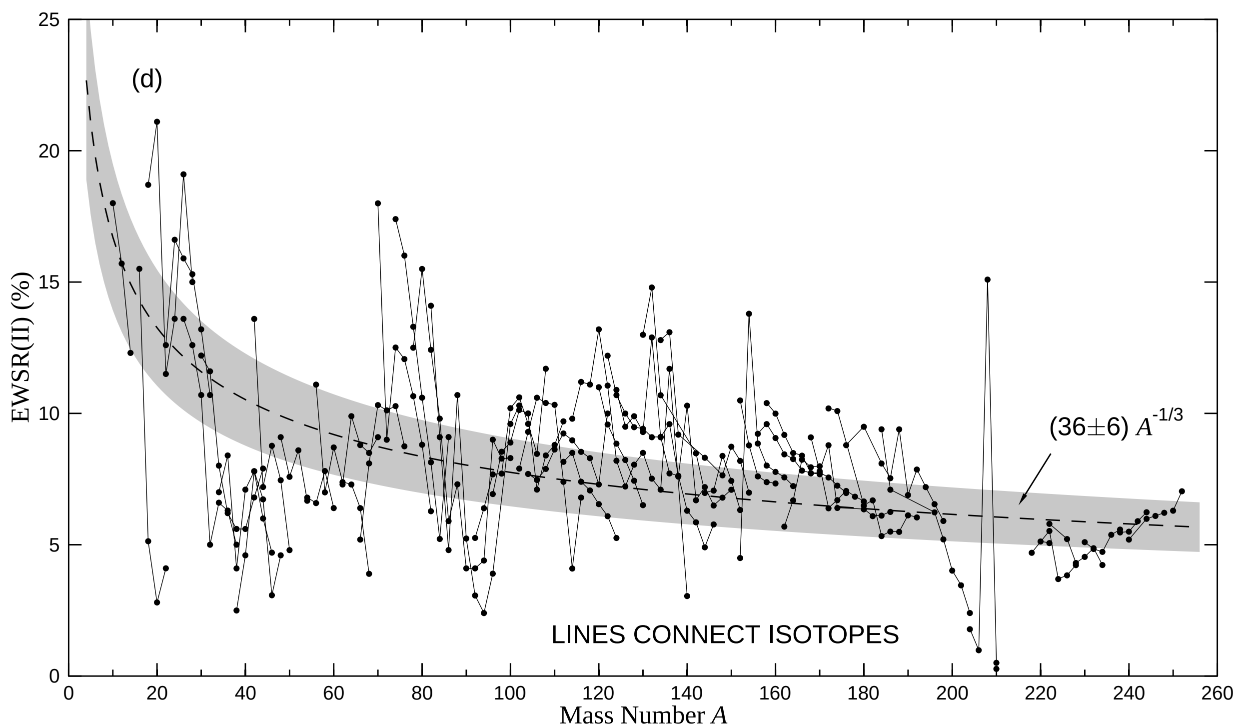


FIGURE II. Summary of Various Adopted Quantities as a Function of Proton Number Z

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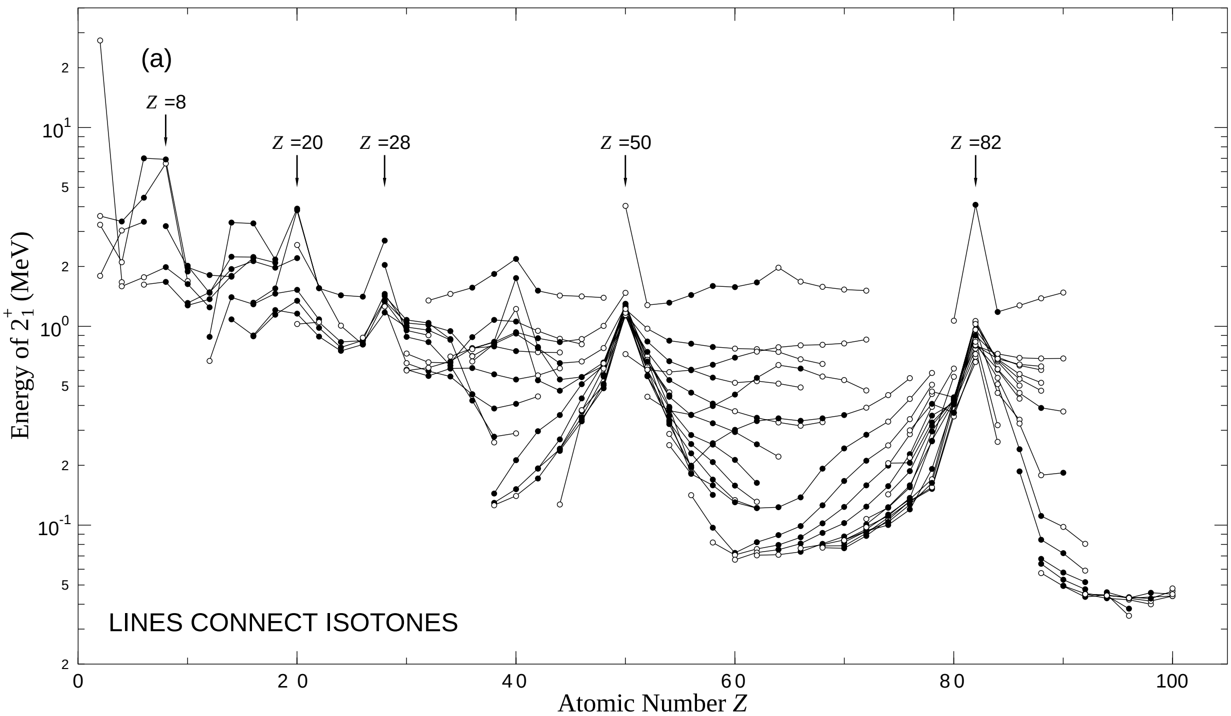


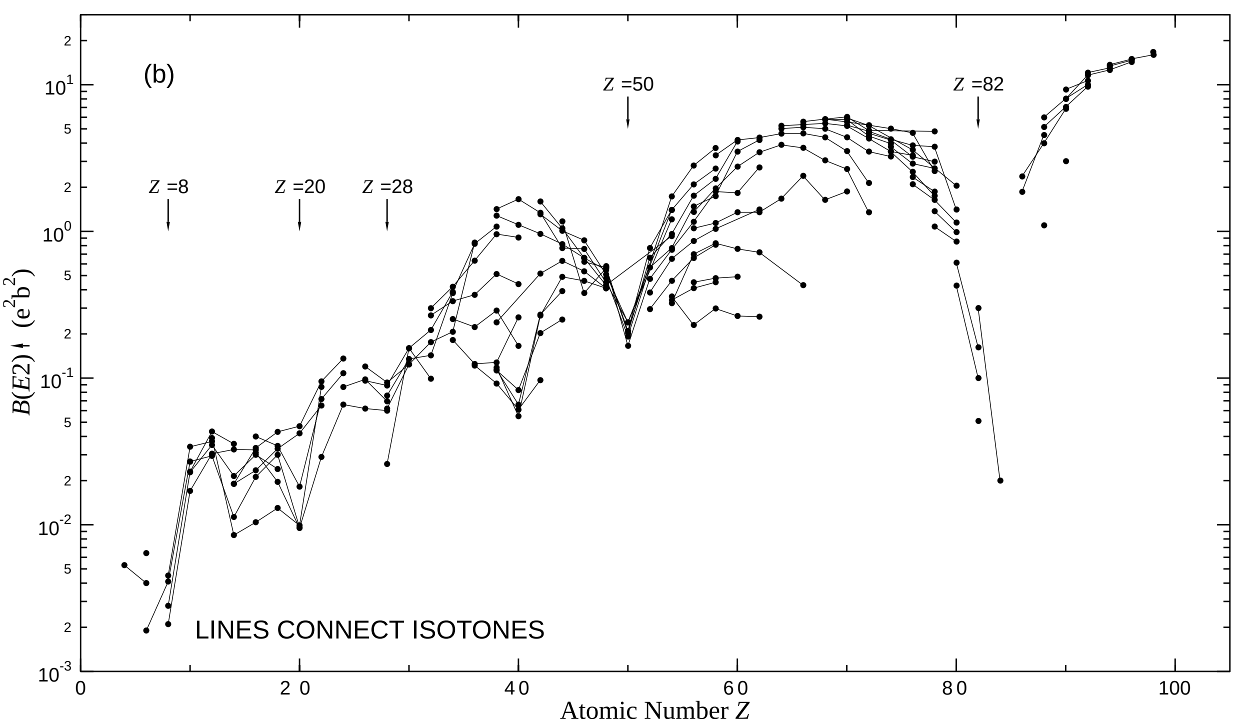
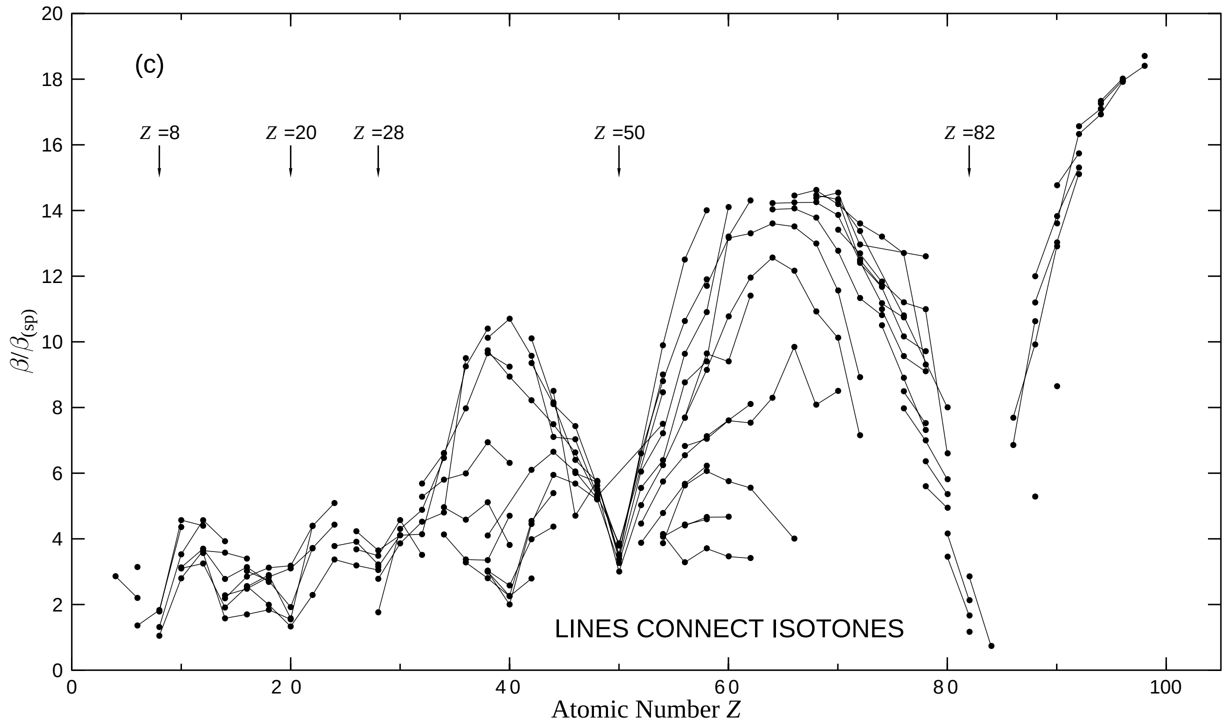


FIGURE II. Summary of Various Adopted Quantities as a Function of Proton Number Z

See page 13 for Explanation of Figures



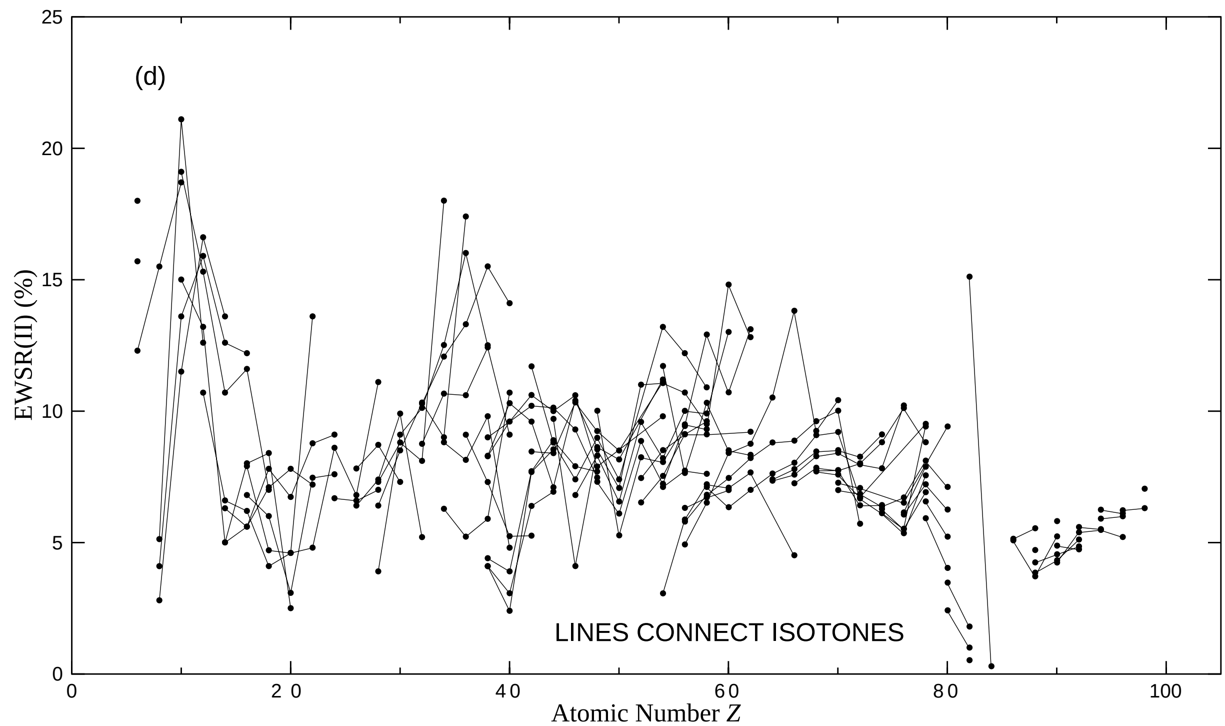
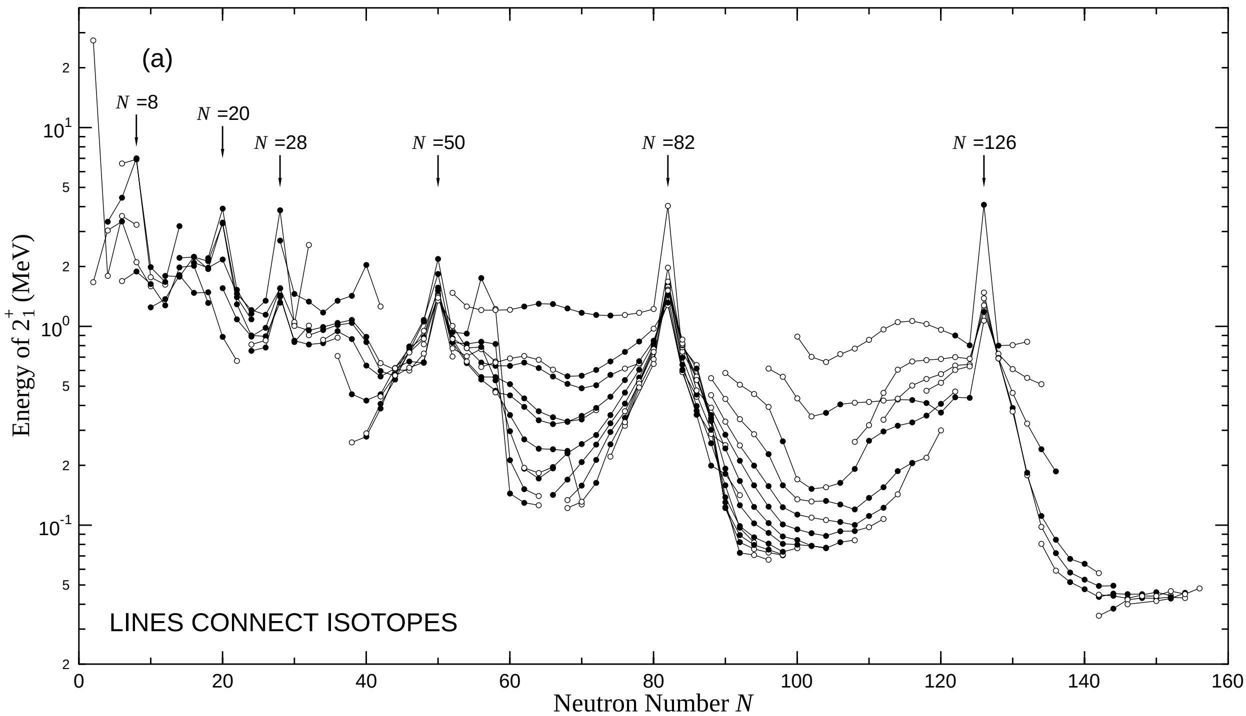
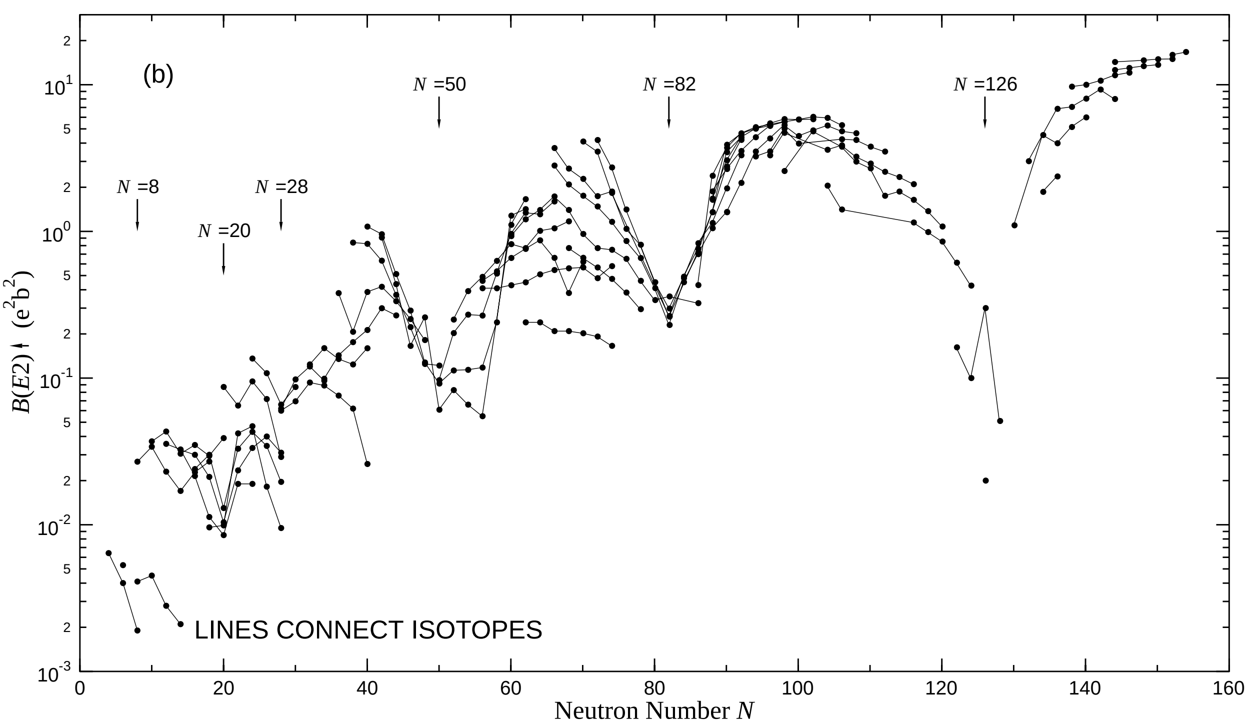


FIGURE III. Summary of Various Adopted Quantities as a Function of Neutron Number N

See page 13 for Explanation of Figures





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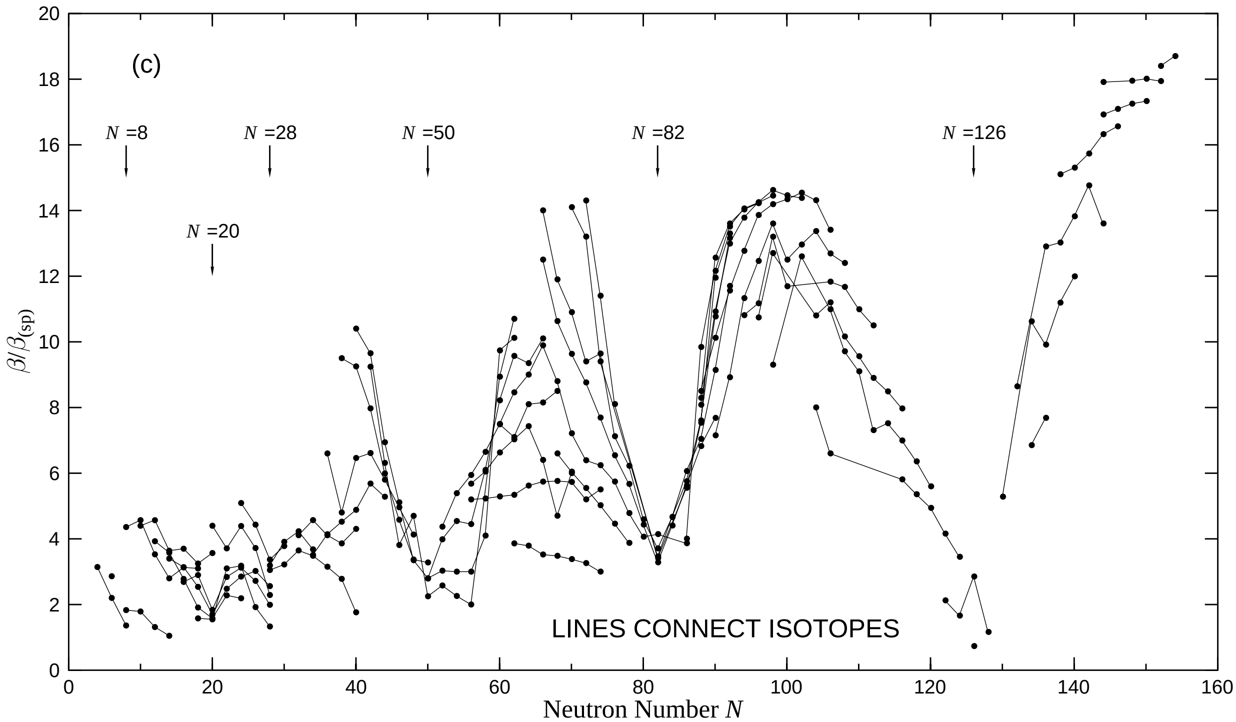
See page 13 for Explanation of Figures



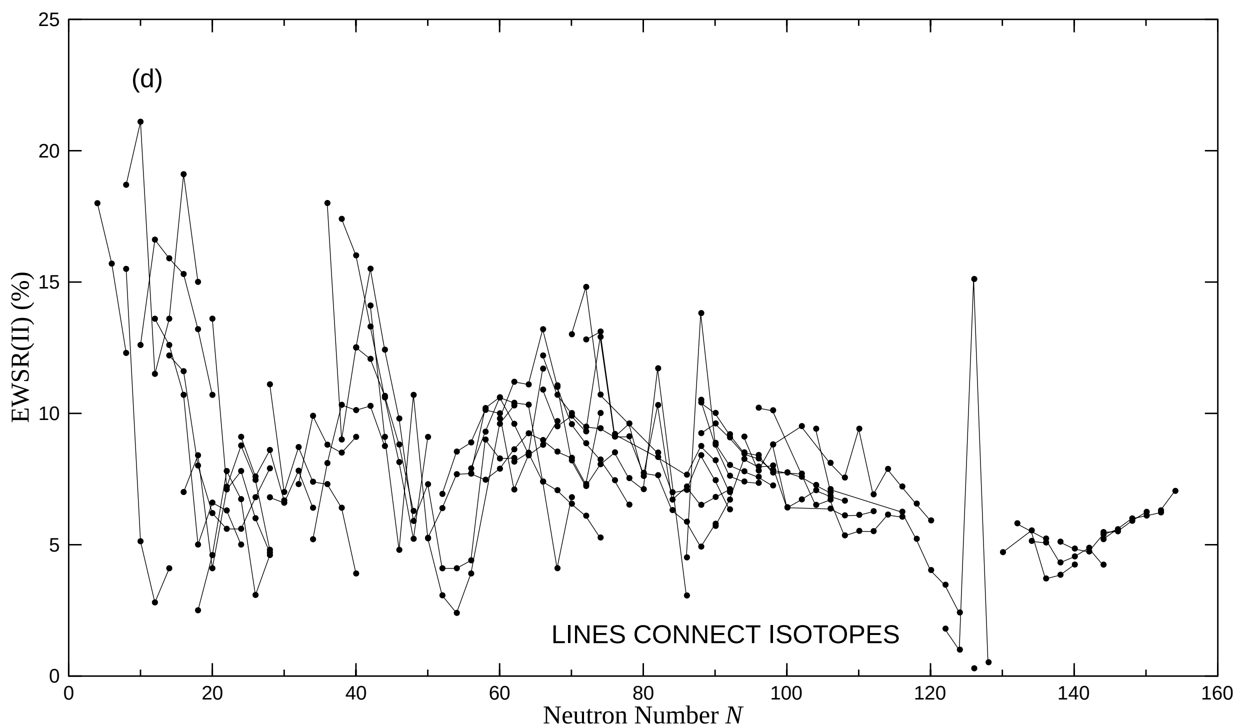
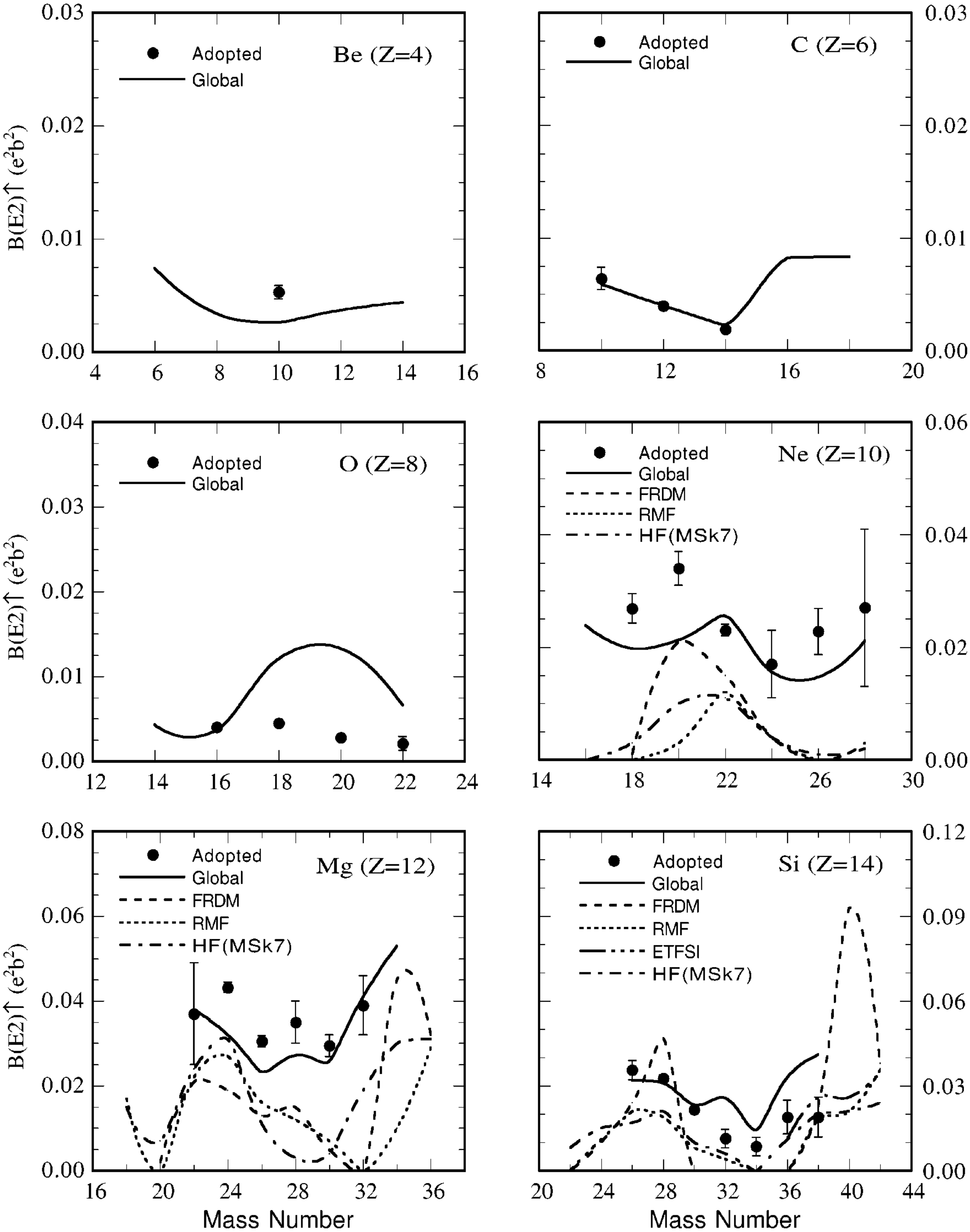


FIGURE IV. Summary of Graphs of $B(E2)\uparrow$ Predictions for Beryllium to Fermium Isotopes

See page 13 for Explanation of Figures



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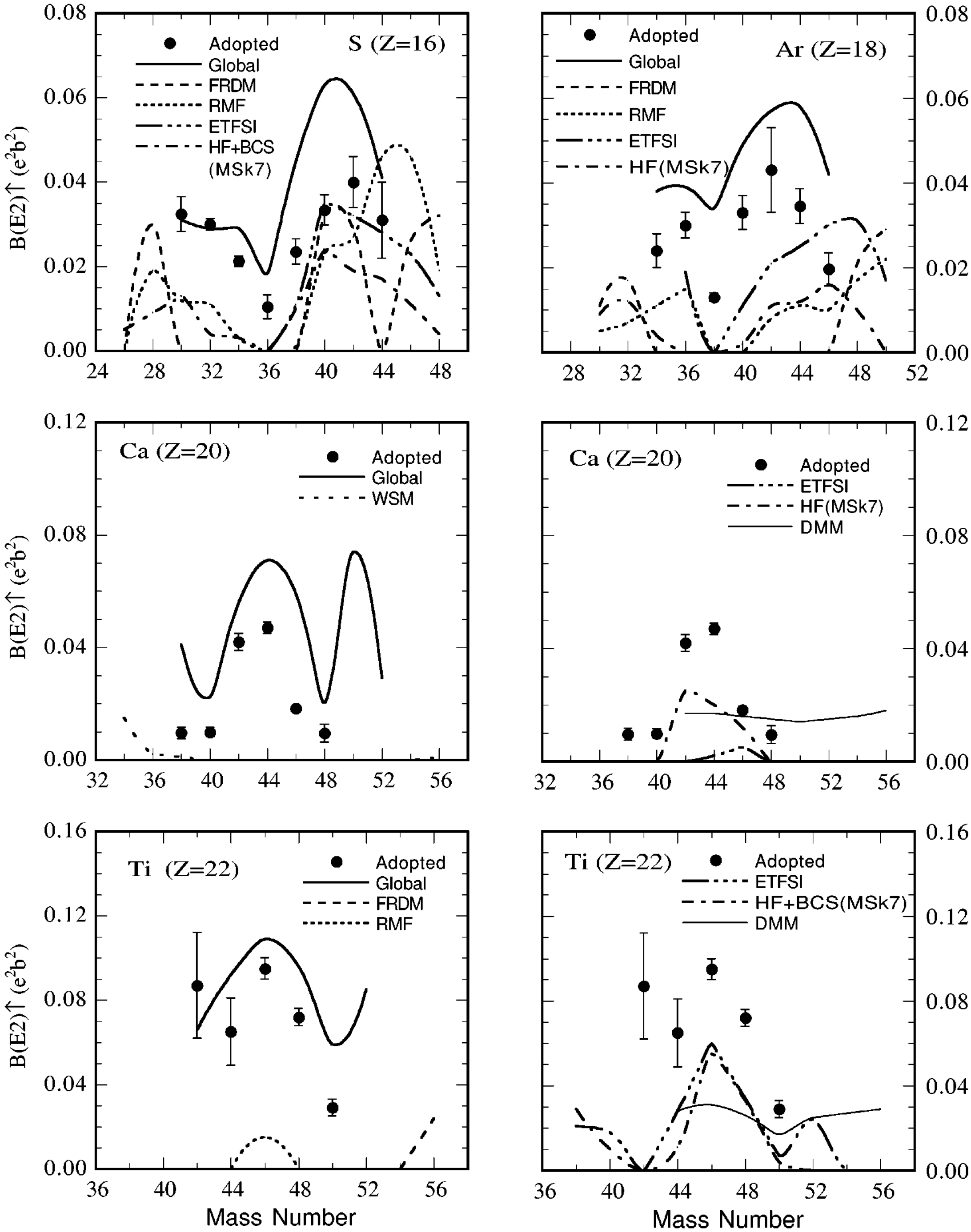

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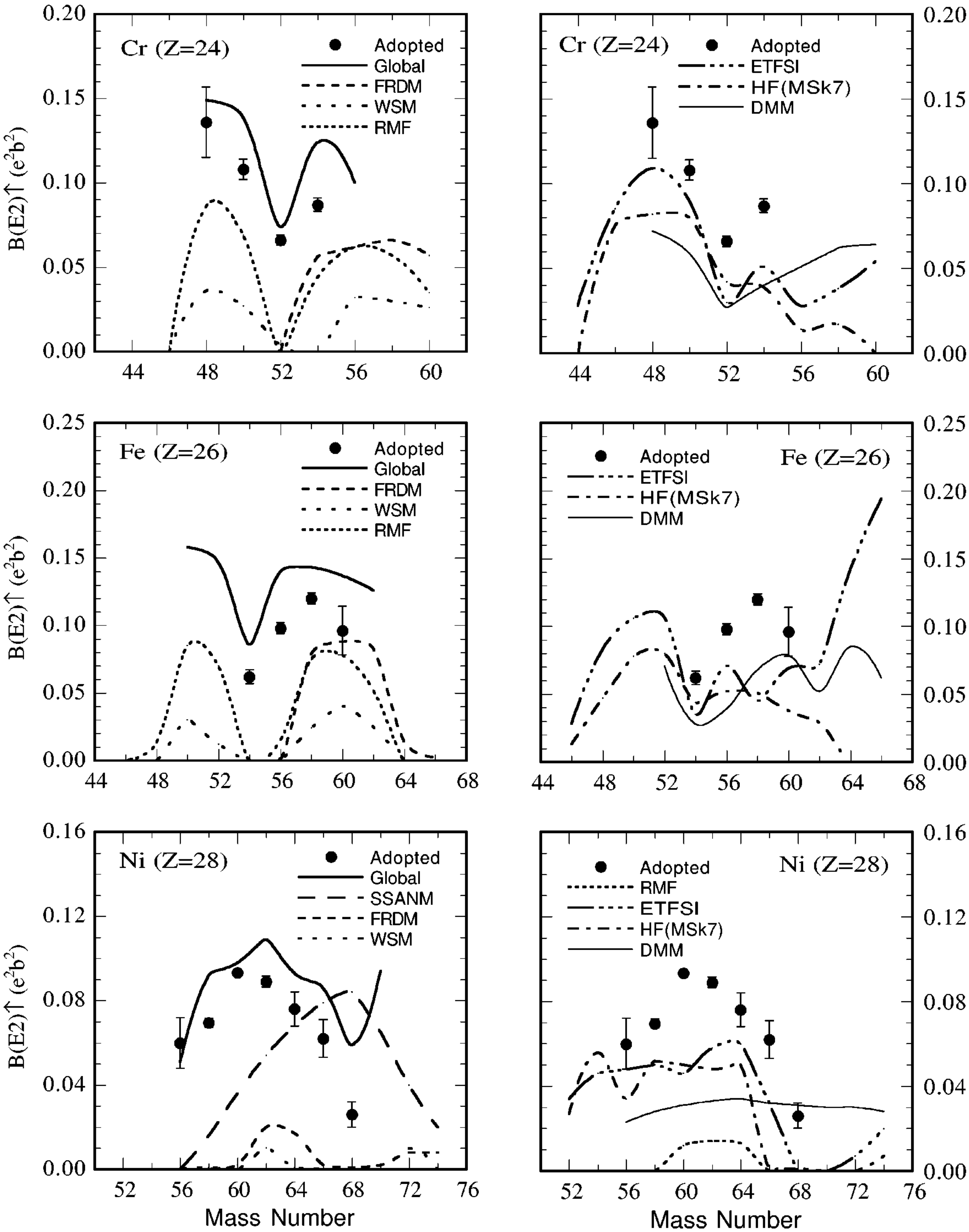

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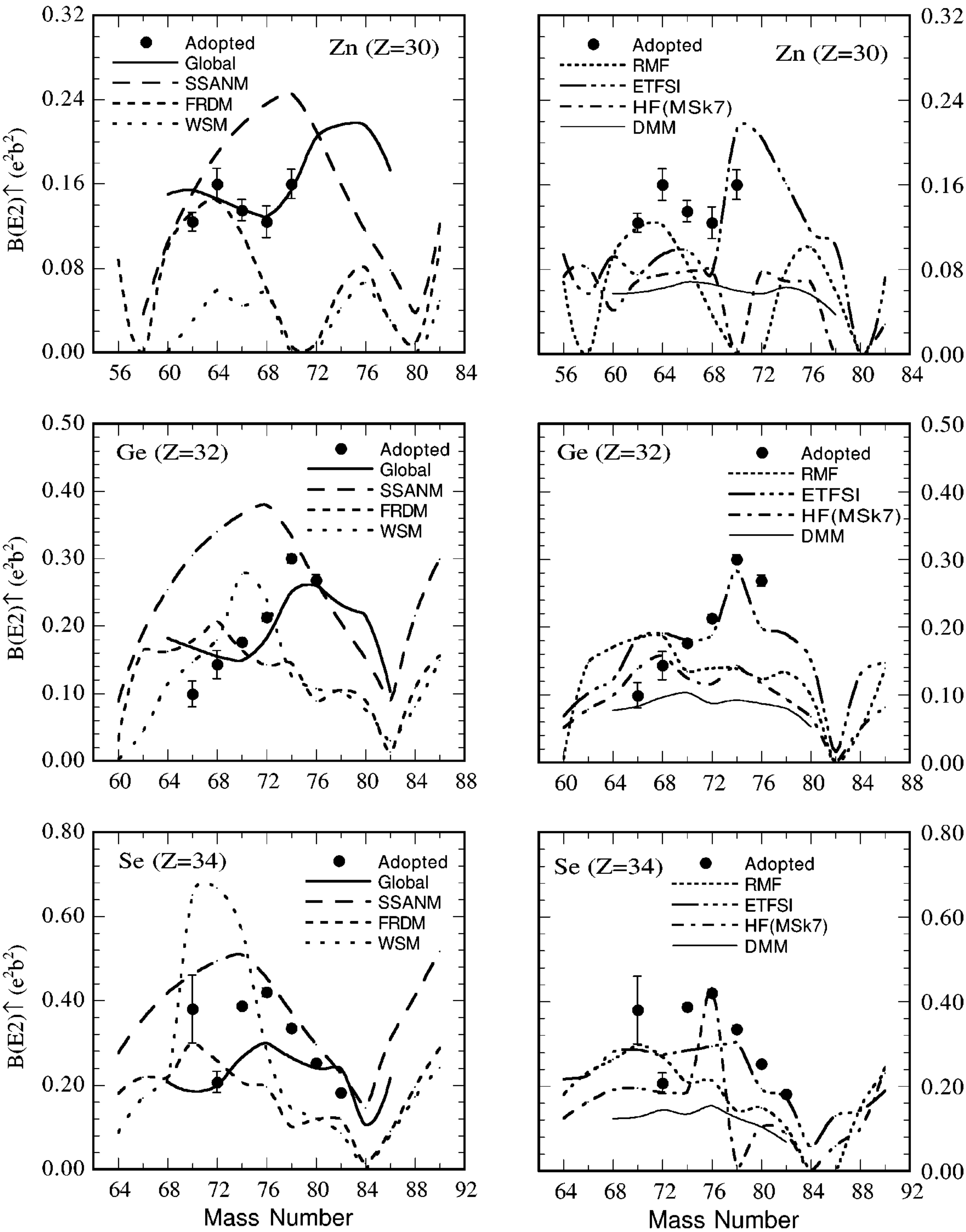

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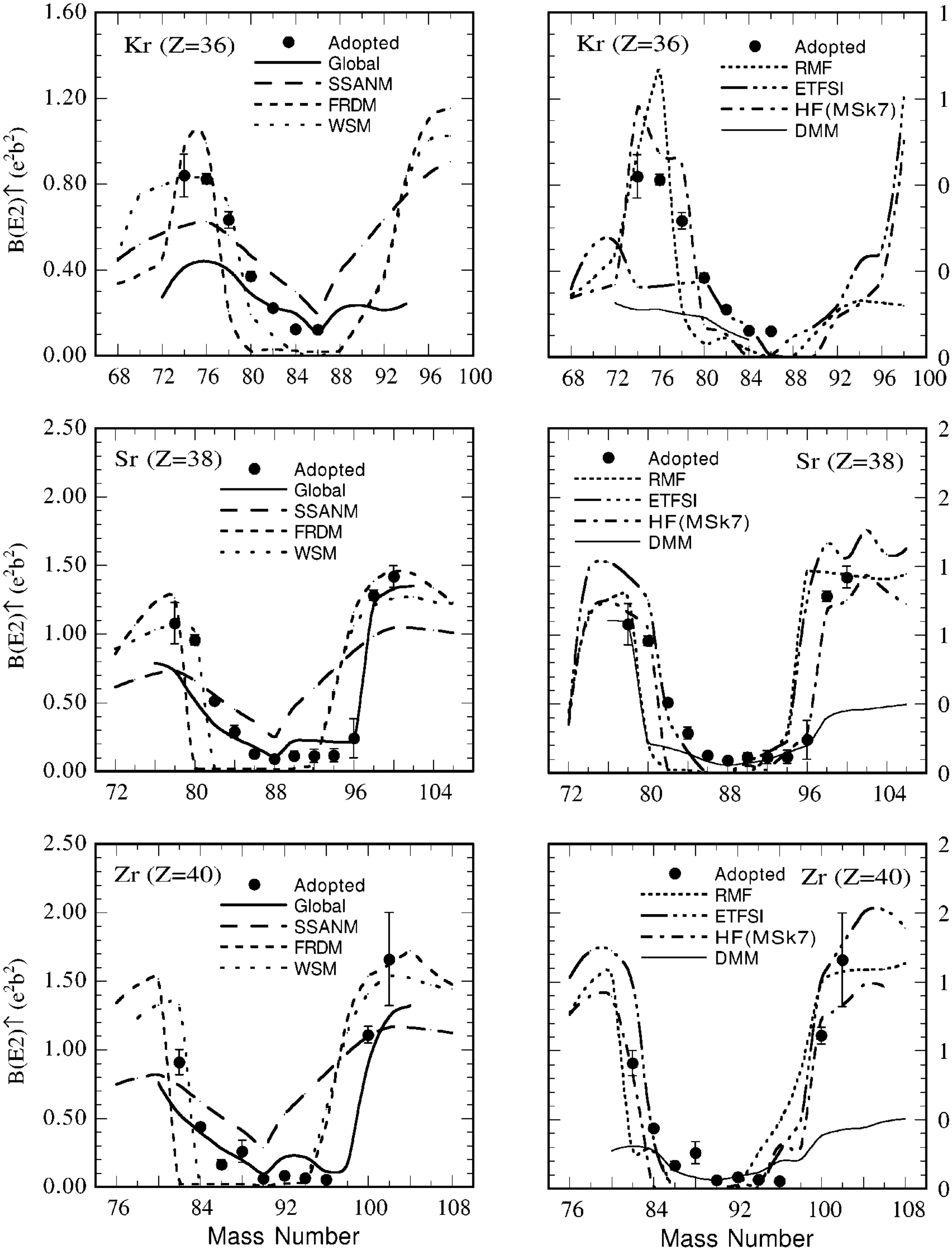

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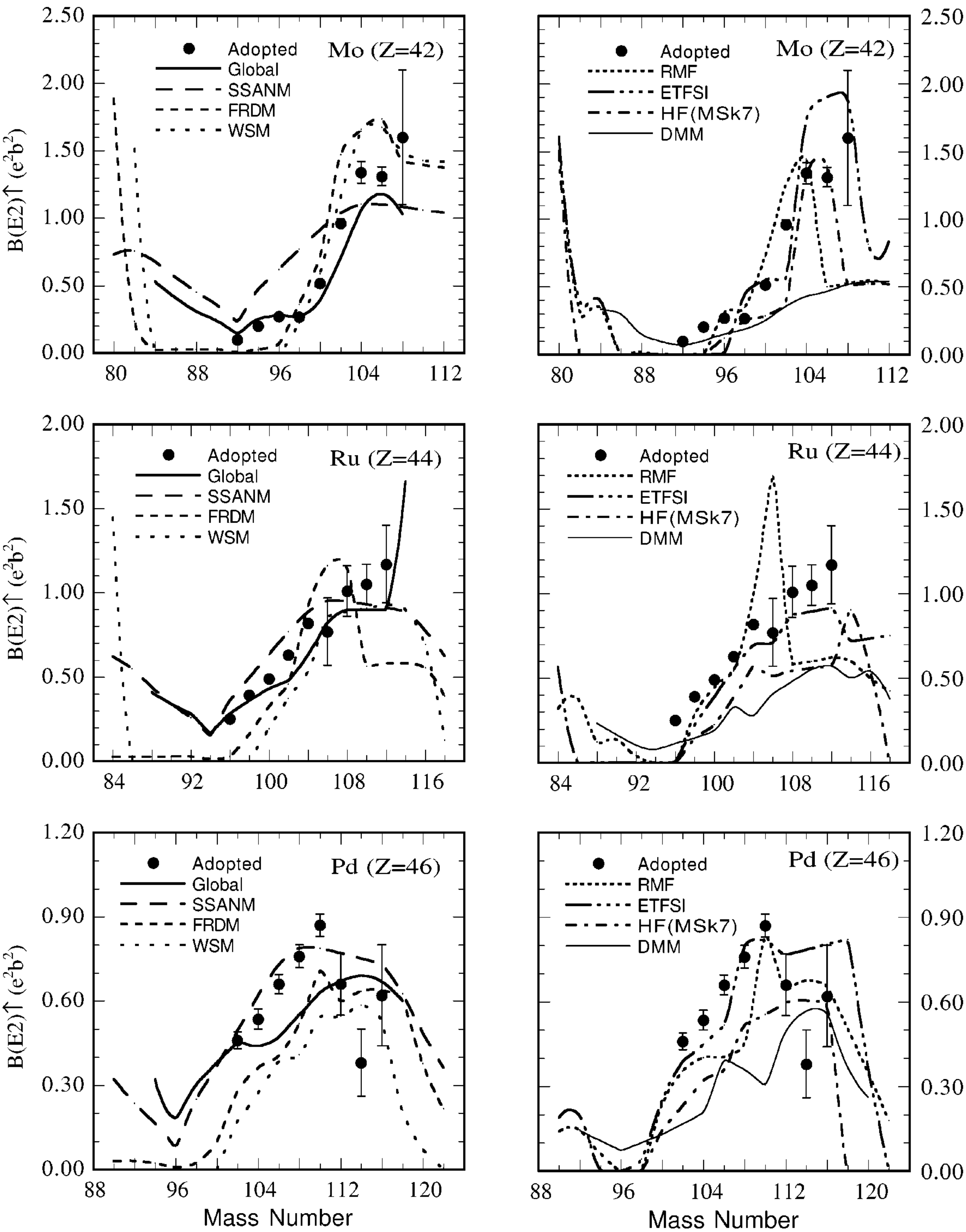

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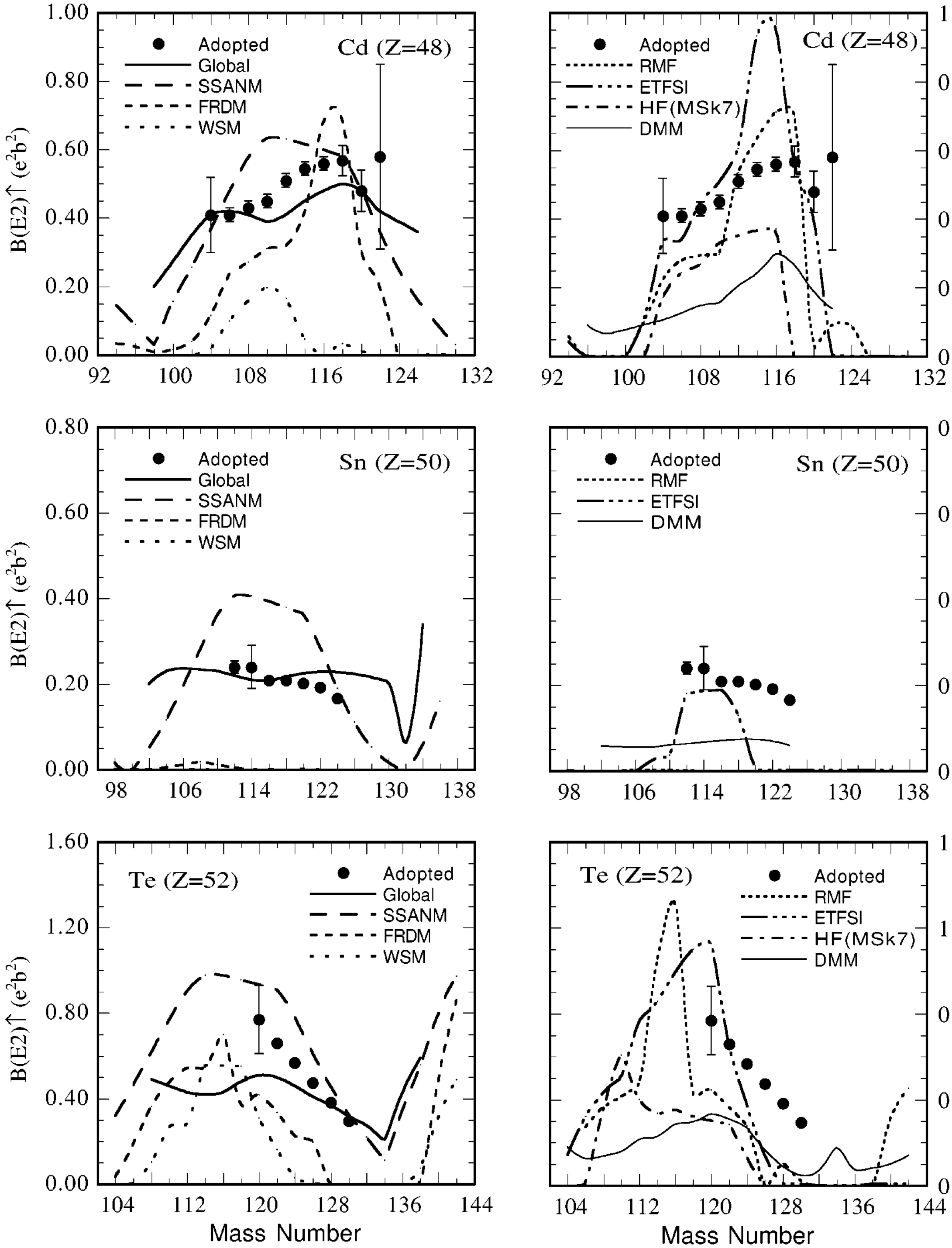

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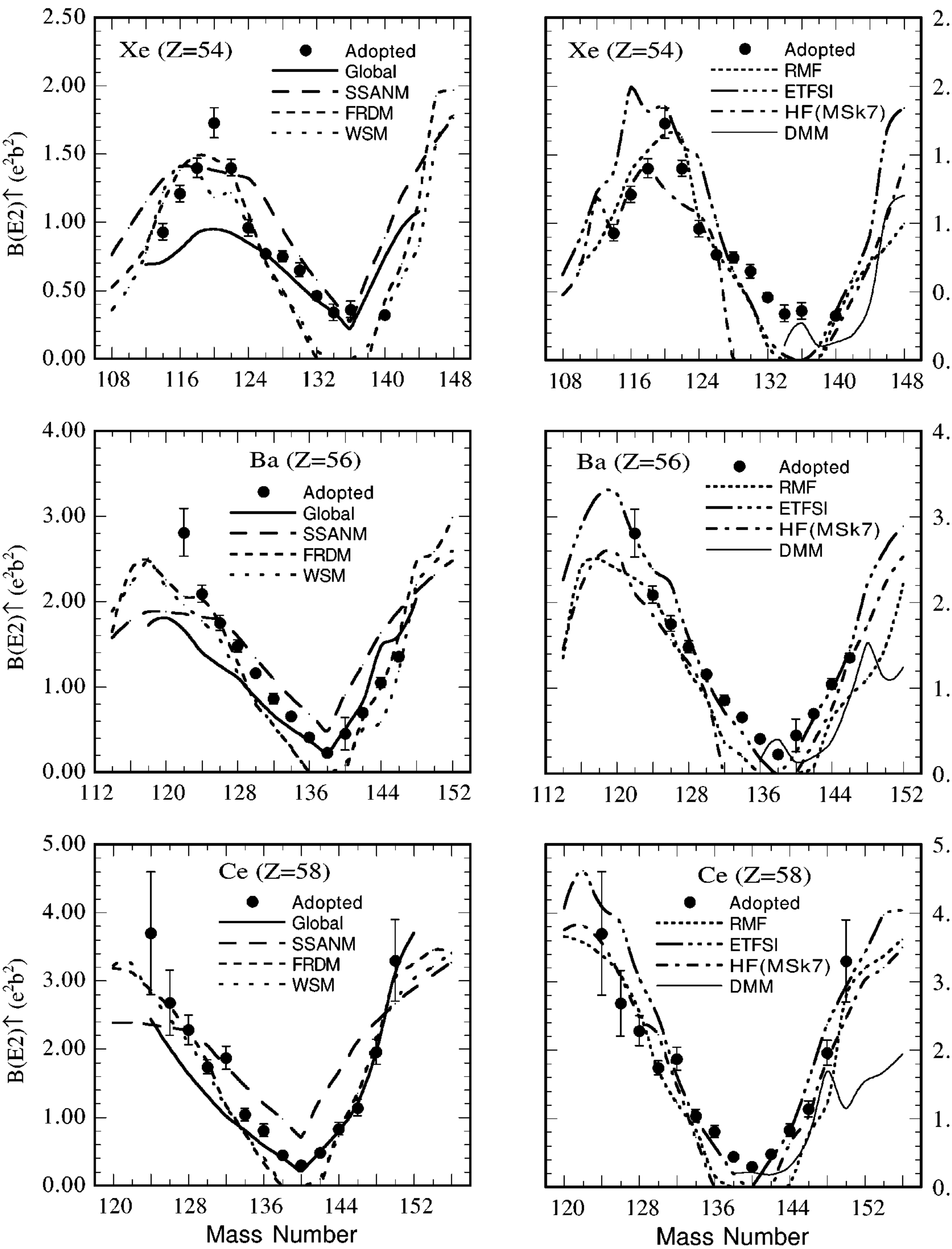

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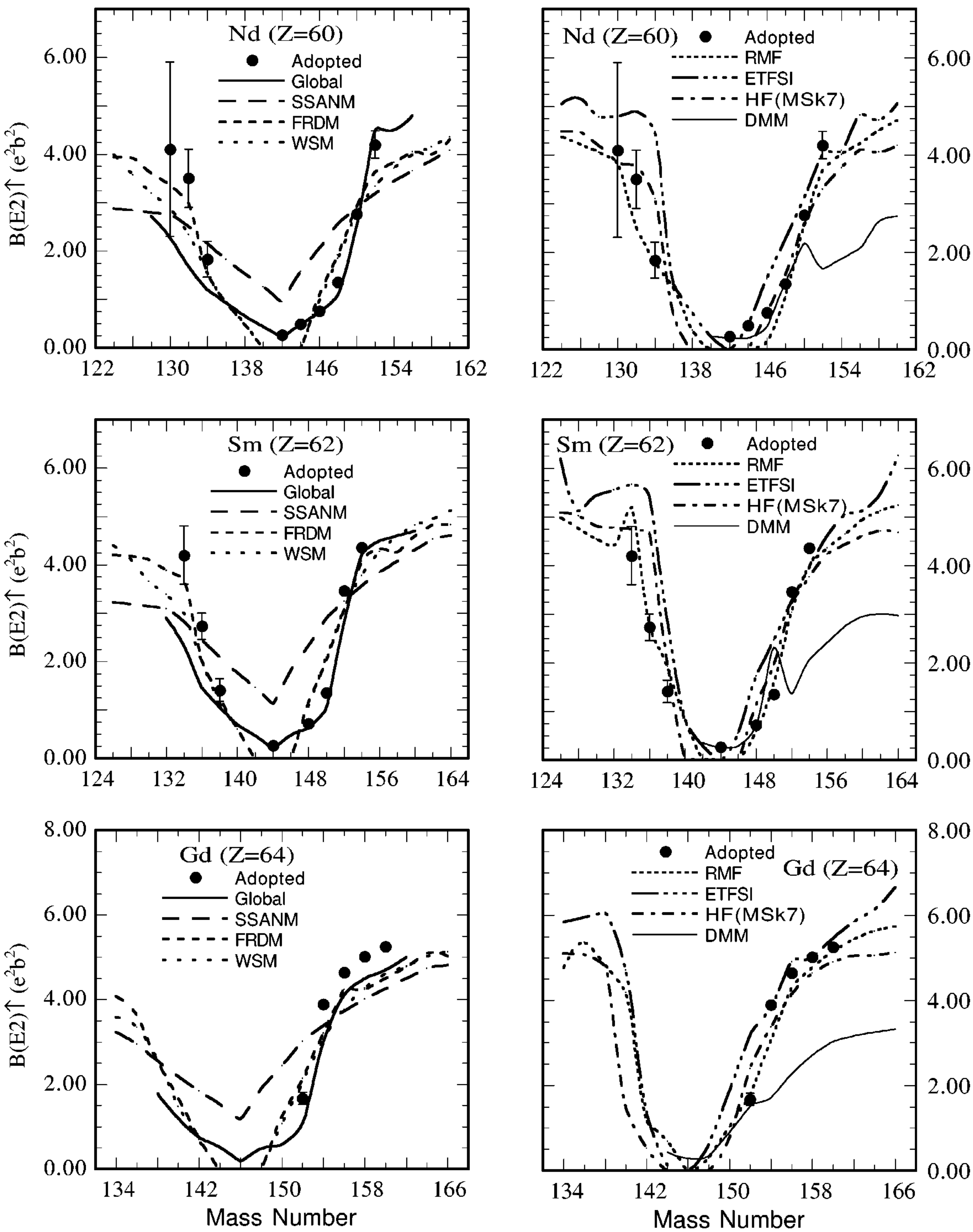

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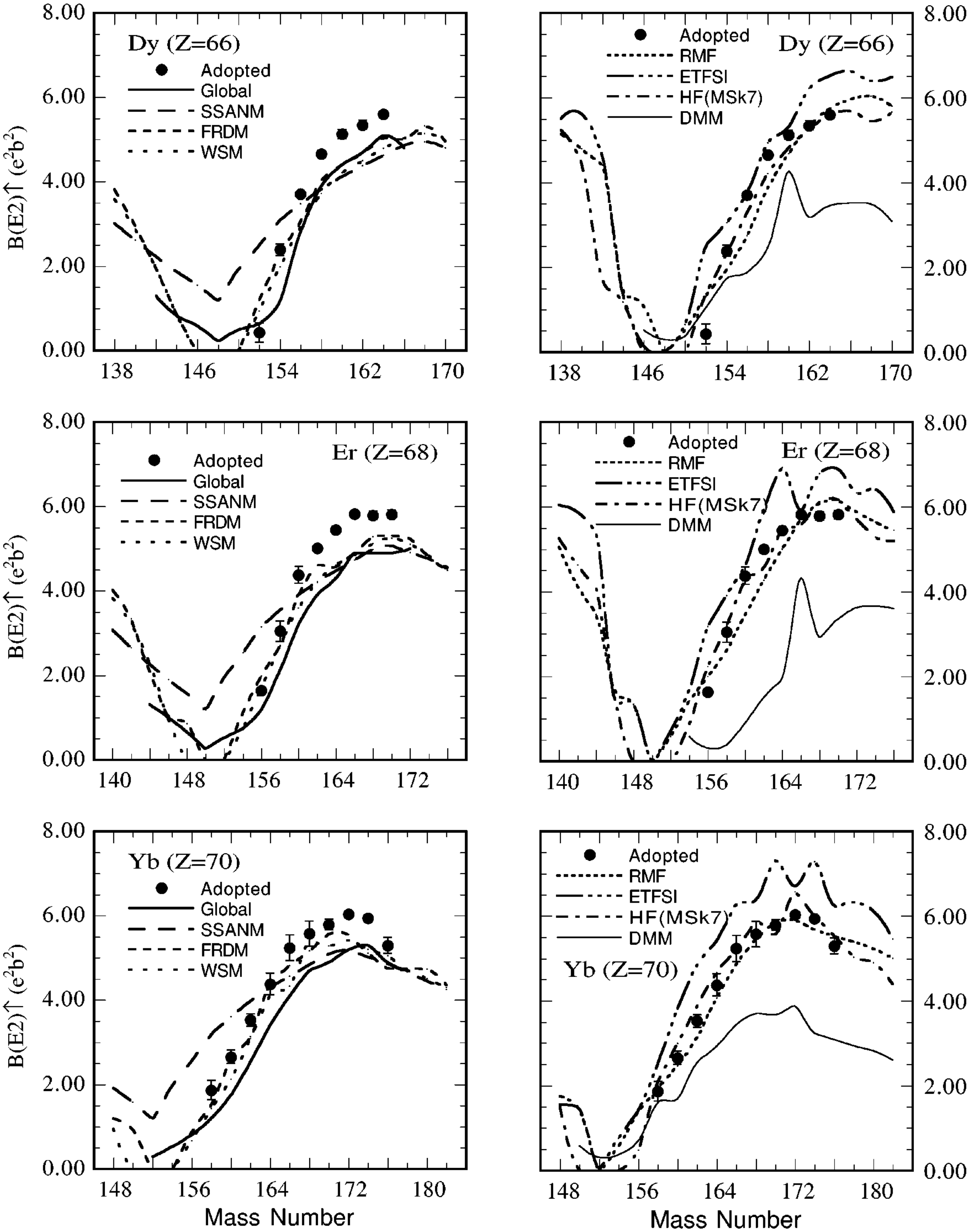

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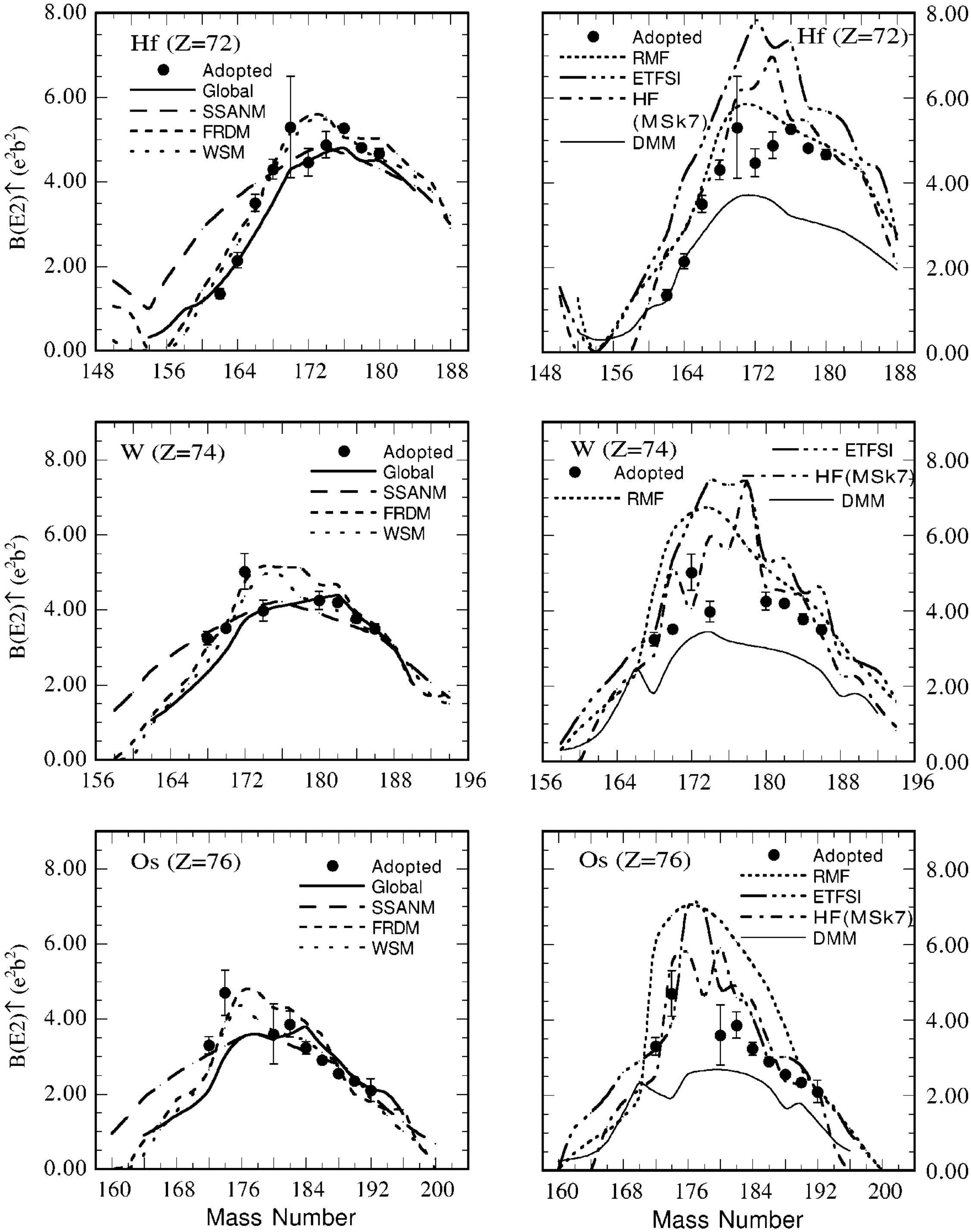

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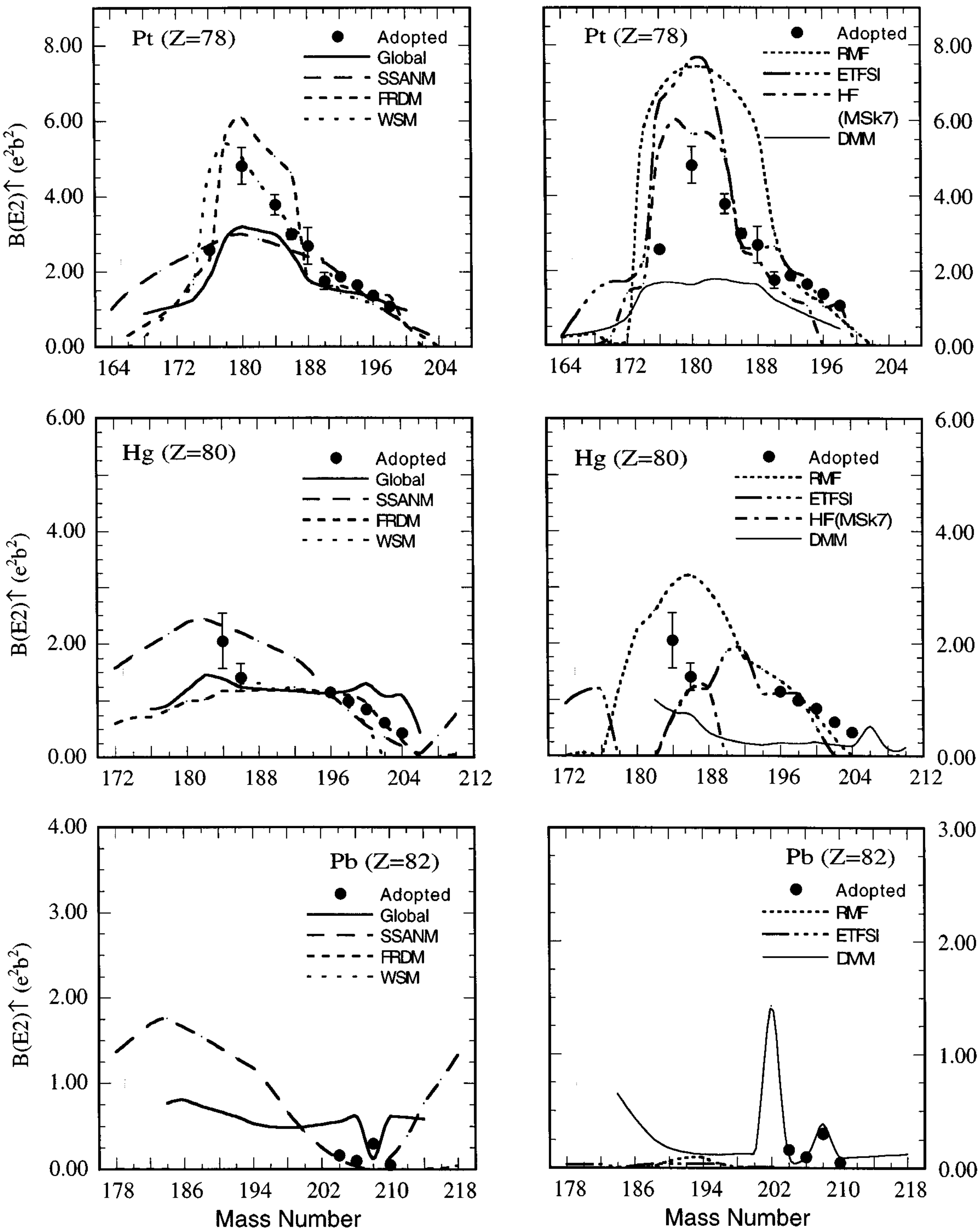

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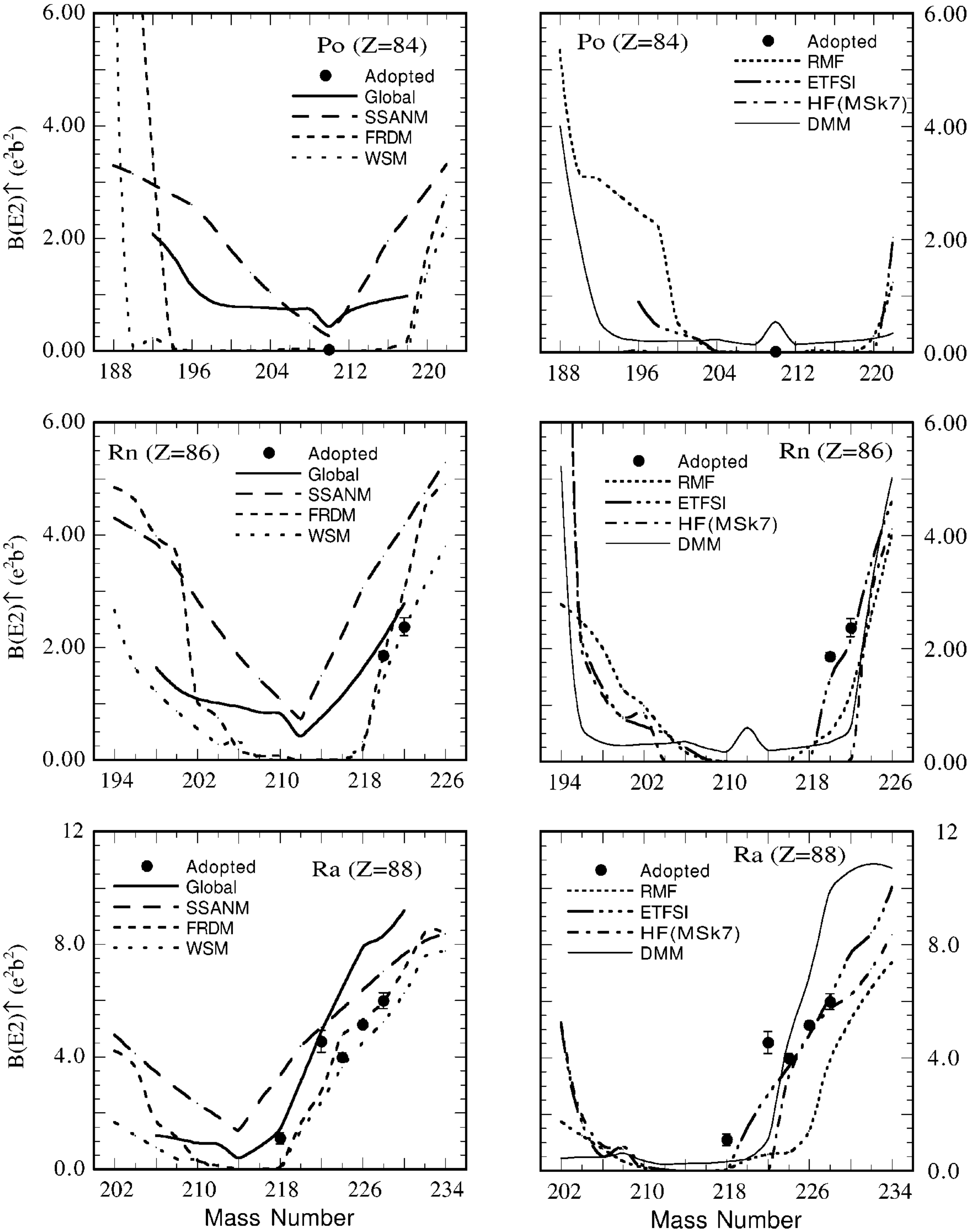

FIGURE IV. Summary of Graphs of $B(E2)\uparrow$ Predictions for Beryllium to Fermium Isotopes

See page 13 for Explanation of Figures

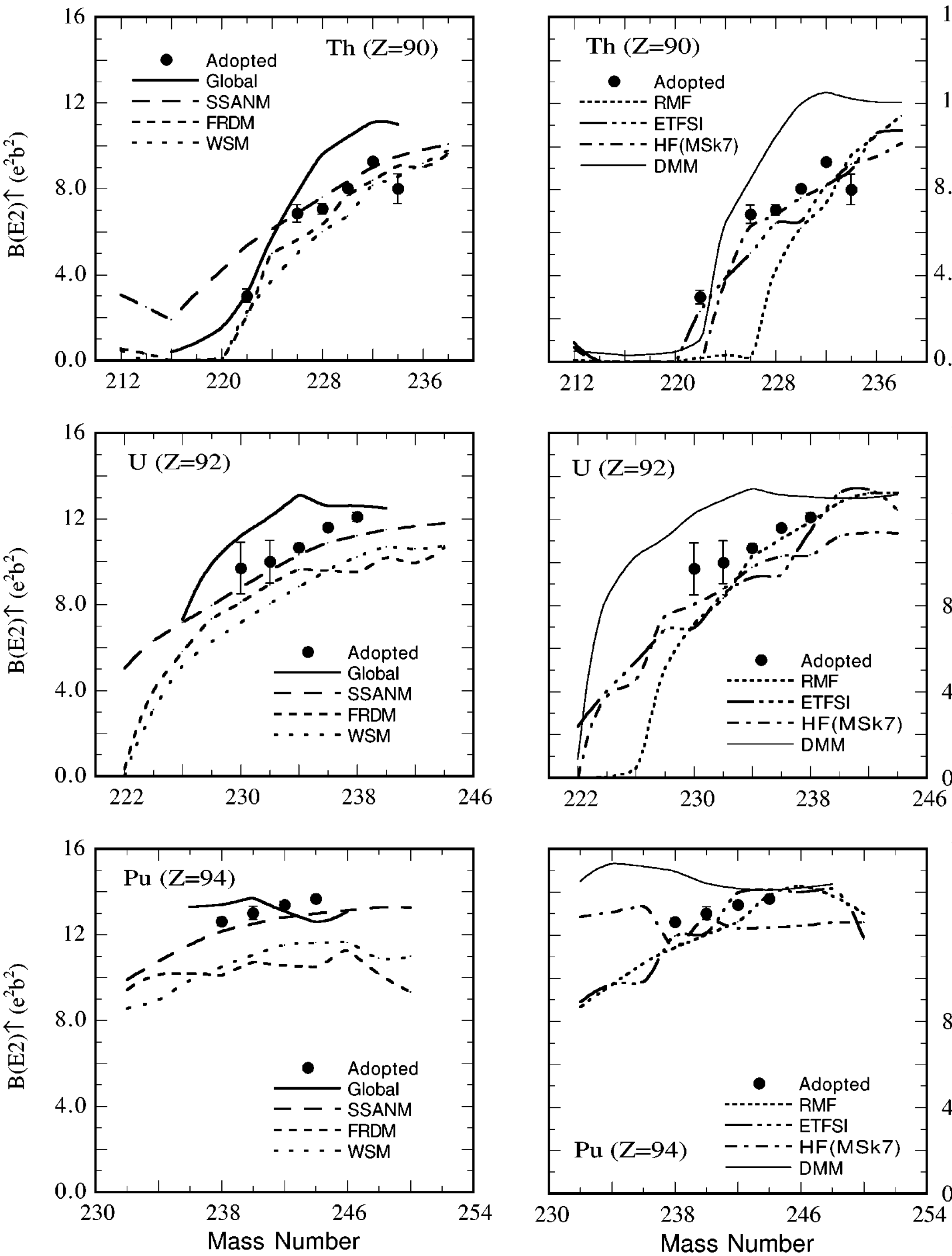

FIGURE IV. Summary of Graphs of $B(E2)\uparrow$ Predictions for Beryllium to Fermium Isotopes

See page 13 for Explanation of Figures

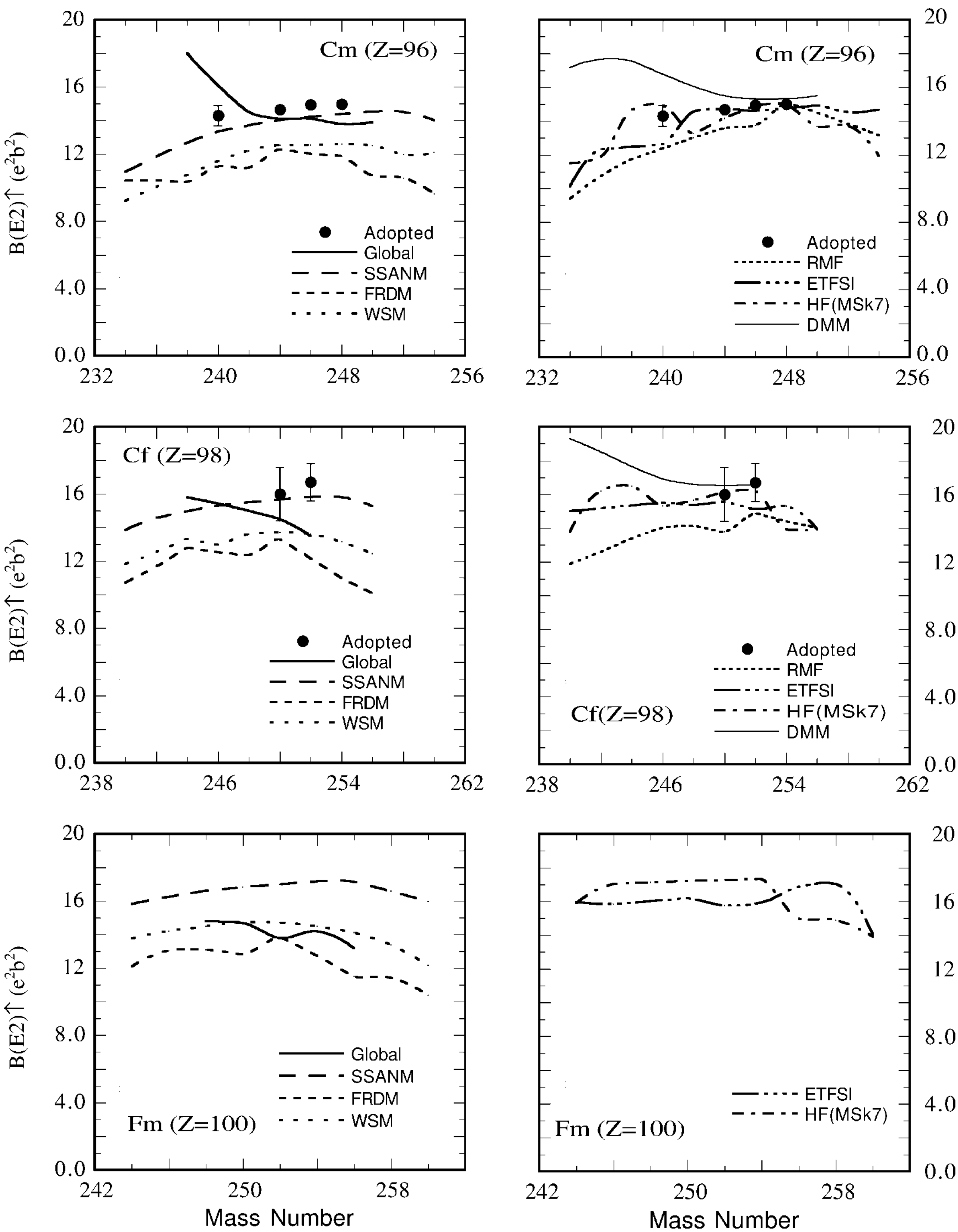

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{4}_{2}He_{2}$	27420 *90*							
$^{6}_{2}He_{4}$	1797 *25*							
$^{8}_{2}He_{6}$	3590 *60*							
$^{10}_{2}He_{8}$	3240 *200*							
$^{6}_{4}Be_{2}$	1670 *50*							
$^{8}_{4}Be_{4}$	3040 *30*							
$^{10}_{4}Be_{6}$	3368.03 *3*	0.0053 *6*	0.181 *21*	1.14 *6*	2.86 *16*	0.230 *13*	5.4 *6*	33.7 *38*
$^{12}_{4}Be_{8}$	2102 *12*							
$^{14}_{4}Be_{10}$	1590 *120*							
$^{10}_{6}C_{4}$	3353.6 *7*	0.0064 *10*	0.155 *25*	0.83 *7*	3.14 *25*	0.253 *20*	6.5 *10*	18.0 *28*
$^{12}_{6}C_{6}$	4438.91 *31*	0.00397 *33*	0.060 *5*	0.582 *24*	2.20 *9*	0.200 *8*	3.93 *33*	15.7 *13*
$^{14}_{6}C_{8}$	7012 *4*	0.00187 *25*	0.0131 *18*	0.360 *24*	1.36 *9*	0.137 *9*	2.26 *30*	12.3 *17*
$^{16}_{6}C_{10}$	1766 *10*							
$^{18}_{6}C_{12}$	1620 *20*							
$^{14}_{8}O_{6}$	6590 *10*							
$^{16}_{8}O_{8}$	6917.1 *6*	0.00406 *38*	0.0064 *6*	0.364 *17*	1.83 *9*	0.202 *9*	3.88 *36*	15.5 *15*
$^{18}_{8}O_{10}$	1982.07 *9*	0.00451 *20*	2.96 *13*	0.355 *8*	1.788 *40*	0.2129 *47*	1.014 *45*	5.13 *23*
$^{20}_{8}O_{12}$	1673.68 *15*	0.00281 *20*	11.1 *8*	0.261 *9*	1.315 *47*	0.168 *6*	0.448 *32*	2.80 *20*
$^{22}_{8}O_{14}$	3190 *15*	0.0021 *8*	0.69 *28*	0.208 *41*	1.05 *21*	0.143 *28*	0.54 *21*	4.1 *16*
$^{16}_{10}Ne_{6}$	1690 *70*							
$^{18}_{10}Ne_{8}$	1887.3 *2*	0.0269 *26*	0.64 *6*	0.694 *34*	4.36 *21*	0.519 *25*	5.8 *6*	18.7 *18*
$^{20}_{10}Ne_{10}$	1633.674 *15*	0.0340 *30*	1.04 *9*	0.727 *32*	4.57 *20*	0.584 *26*	5.29 *47*	21.1 *19*
$^{22}_{10}Ne_{12}$	1274.542 *7*	0.0230 *10*	5.29 *23*	0.562 *12*	3.53 *8*	0.481 *10*	2.38 *10*	11.5 *5*
$^{24}_{10}Ne_{14}$	1981.6 *4*	0.017 *6*	0.92 *32*	0.45 *8*	2.8 *5*	0.41 *7*	2.4 *8*	13.6 *48*
$^{26}_{10}Ne_{16}$	2018.2 *3*	0.0228 *41*	0.55 *10*	0.498 *45*	3.13 *28*	0.477 *43*	2.8 *5*	19.1 *34*
$^{28}_{10}Ne_{18}$	1310 *20*	0.027 *14*	5.6 *32*	0.50 *14*	3.1 *9*	0.50 *14*	1.9 *10*	15 *8*
$^{22}_{12}Mg_{10}$	1246.3 *6*	0.037 *13*	4.2 *15*	0.58 *11*	4.4 *8*	0.60 *11*	3.7 *13*	12.6 *44*
$^{24}_{12}Mg_{12}$	1368.675 *6*	0.0432 *11*	1.97 *5*	0.605 *8*	4.57 *6*	0.659 *8*	4.15 *11*	16.61 *42*
$^{26}_{12}Mg_{14}$	1808.73 *3*	0.0305 *13*	0.692 *30*	0.482 *10*	3.64 *8*	0.554 *12*	3.39 *14*	15.9 *7*
$^{28}_{12}Mg_{16}$	1473.4 *6*	0.035 *5*	1.73 *26*	0.491 *35*	3.70 *27*	0.592 *42*	2.80 *40*	15.3 *22*
$^{30}_{12}Mg_{18}$	1482.2 *4*	0.0295 *26*	1.95 *17*	0.431 *19*	3.25 *14*	0.544 *24*	2.12 *19*	13.2 *12*
$^{32}_{12}Mg_{20}$	885.5 *7*	0.039 *7*	19.9 *36*	0.473 *43*	3.57 *32*	0.62 *6*	1.50 *27*	10.7 *19*
$^{34}_{12}Mg_{22}$	670 *10*							
$^{26}_{14}Si_{12}$	1795.9 *2*	0.0356 *34*	0.62 *6*	0.446 *21*	3.93 *19*	0.598 *29*	3.93 *38*	13.6 *13*
$^{28}_{14}Si_{14}$	1779.030 *11*	0.0326 *12*	0.703 *26*	0.407 *7*	3.58 *7*	0.572 *11*	3.15 *12*	12.60 *46*
$^{30}_{14}Si_{16}$	2235.33 *3*	0.0215 *10*	0.340 *16*	0.315 *7*	2.78 *6*	0.465 *11*	2.33 *11*	10.7 *5*
$^{32}_{14}Si_{18}$	1941.5 *2*	0.0113 *33*	1.43 *42*	0.217 *32*	1.91 *28*	0.33 *5*	0.95 *28*	5.0 *15*
$^{34}_{14}Si_{20}$	3327.5 *5*	0.0085 *33*	0.15 *7*	0.179 *36*	1.58 *32*	0.29 *6*	1.11 *43*	6.6 *25*
$^{36}_{14}Si_{22}$	1399 *25*	0.019 *6*	4.5 *17*	0.259 *42*	2.28 *37*	0.43 *7*	0.96 *32*	6.3 *21*
$^{38}_{14}Si_{24}$	1084 *20*	0.019 *7*	17 *8*	0.249 *48*	2.19 *42*	0.43 *8*	0.68 *26*	5.0 *19*
$^{30}_{16}S_{14}$	2210.6 *5*	0.0324 *41*	0.242 *30*	0.338 *21*	3.40 *22*	0.570 *36*	3.47 *44*	12.2 *15*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{32}_{16}S_{16}$	2230.3 *2*	0.0300 *13*	0.247 *11*	0.312 *7*	3.14 *7*	0.549 *12*	2.91 *13*	11.6 *5*
$^{34}_{16}S_{18}$	2127.564 *13*	0.0212 *12*	0.443 *25*	0.252 *7*	2.54 *7*	0.461 *13*	1.77 *10*	8.01 *45*
$^{36}_{16}S_{20}$	3290.9 *3*	0.0104 *28*	0.110 *30*	0.168 *23*	1.70 *23*	0.320 *44*	1.22 *33*	6.2 *17*
$^{38}_{16}S_{22}$	1292.0 *2*	0.0235 *30*	4.9 *6*	0.246 *16*	2.48 *16*	0.485 *31*	0.99 *13*	5.6 *7*
$^{40}_{16}S_{24}$	900 *10*	0.0334 *36*	21.1 *34*	0.284 *15*	2.85 *15*	0.579 *31*	0.90 *11*	5.6 *7*
$^{42}_{16}S_{26}$	890 *10*	0.040 *6*	18.9 *39*	0.300 *23*	3.02 *23*	0.632 *48*	0.99 *16*	6.8 *11*
$^{44}_{16}S_{28}$	1315 *15*	0.031 *9*	3.7 *13*	0.254 *38*	2.56 *38*	0.55 *8*	1.05 *31*	7.9 *24*
$^{34}_{18}Ar_{16}$	2090.9 *3*	0.0240 *40*	0.44 *7*	0.238 *20*	2.69 *23*	0.489 *41*	1.97 *33*	7.0 *12*
$^{36}_{18}Ar_{18}$	1970.39 *5*	0.0300 *30*	0.463 *46*	0.256 *13*	2.90 *15*	0.548 *27*	2.11 *21*	8.4 *8*
$^{38}_{18}Ar_{20}$	2167.472 *9*	0.0130 *10*	0.66 *5*	0.163 *6*	1.84 *7*	0.361 *14*	0.92 *7*	4.10 *32*
$^{40}_{18}Ar_{22}$	1460.859 *5*	0.0330 *40*	1.89 *23*	0.251 *15*	2.84 *17*	0.575 *35*	1.45 *18*	7.1 *9*
$^{42}_{18}Ar_{24}$	1208.2 *3*	0.043 *10*	3.9 *9*	0.275 *32*	3.12 *37*	0.65 *8*	1.44 *33*	7.8 *18*
$^{44}_{18}Ar_{26}$	1144 *17*	0.0345 *41*	6.2 *12*	0.240 *14*	2.72 *16*	0.588 *35*	1.01 *13*	6.0 *8*
$^{46}_{18}Ar_{28}$	1550 *10*	0.0196 *39*	2.4 *6*	0.175 *18*	1.99 *20*	0.442 *44*	0.72 *15*	4.7 *10*
$^{38}_{20}Ca_{18}$	2206 *5*	0.0096 *21*	0.86 *20*	0.125 *14*	1.58 *17*	0.309 *34*	0.69 *15*	2.5 *6*
$^{40}_{20}Ca_{20}$	3904.38 *3*	0.0099 *17*	0.047 *8*	0.123 *11*	1.55 *13*	0.314 *27*	1.16 *20*	4.6 *8*
$^{42}_{20}Ca_{22}$	1524.73 *3*	0.0420 *30*	1.19 *9*	0.247 *9*	3.10 *11*	0.649 *23*	1.77 *13*	7.8 *6*
$^{44}_{20}Ca_{24}$	1157.047 *15*	0.0470 *20*	4.19 *18*	0.253 *5*	3.18 *7*	0.687 *15*	1.39 *6*	6.73 *29*
$^{46}_{20}Ca_{26}$	1346.0 *3*	0.0182 *13*	5.10 *37*	0.153 *5*	1.92 *7*	0.427 *15*	0.582 *42*	3.08 *22*
$^{48}_{20}Ca_{28}$	3831.72 *6*	0.0095 *32*	0.059 *20*	0.106 *18*	1.33 *23*	0.30 *5*	0.81 *27*	4.6 *16*
$^{50}_{20}Ca_{30}$	1026 *1*							
$^{52}_{20}Ca_{32}$	2563 *1*							
$^{42}_{22}Ti_{20}$	1554.9 *8*	0.087 *25*	0.56 *16*	0.319 *47*	4.4 *6*	0.93 *14*	3.7 *11*	13.6 *39*
$^{44}_{22}Ti_{22}$	1082.99 *9*	0.065 *16*	4.5 *11*	0.268 *34*	3.71 *46*	0.80 *10*	1.80 *44*	7.2 *18*
$^{46}_{22}Ti_{24}$	889.286 *3*	0.095 *5*	7.74 *41*	0.317 *8*	4.39 *12*	0.977 *26*	2.01 *11*	8.77 *46*
$^{48}_{22}Ti_{26}$	983.519 *5*	0.0720 *40*	6.18 *34*	0.269 *7*	3.72 *10*	0.850 *24*	1.57 *9*	7.46 *41*
$^{50}_{22}Ti_{28}$	1553.778 *7*	0.0290 *40*	1.58 *22*	0.166 *11*	2.29 *16*	0.539 *37*	0.93 *13*	4.8 *7*
$^{52}_{22}Ti_{30}$	1049.73 *10*							
$^{48}_{24}Cr_{24}$	752.16 *12*	0.136 *21*	12.7 *19*	0.337 *26*	5.09 *40*	1.17 *9*	2.26 *35*	9.1 *14*
$^{50}_{24}Cr_{26}$	783.30 *9*	0.108 *6*	12.8 *8*	0.293 *8*	4.43 *12*	1.042 *29*	1.75 *10*	7.59 *42*
$^{52}_{24}Cr_{28}$	1434.090 *14*	0.0660 *30*	1.021 *47*	0.223 *5*	3.37 *8*	0.814 *19*	1.83 *8*	8.60 *39*
$^{54}_{24}Cr_{30}$	834.855 *3*	0.0870 *40*	11.6 *5*	0.250 *6*	3.78 *9*	0.935 *22*	1.32 *6*	6.68 *31*
$^{56}_{24}Cr_{32}$	1006.61 *20*							
$^{50}_{26}Fe_{24}$	810 *80*							
$^{52}_{26}Fe_{26}$	849.6 *7*							
$^{54}_{26}Fe_{28}$	1408.19 *19*	0.062 *5*	1.20 *10*	0.195 *8*	3.19 *13*	0.789 *32*	1.59 *13*	6.8 *6*
$^{56}_{26}Fe_{30}$	846.776 *5*	0.0980 *40*	9.58 *39*	0.2392 *49*	3.91 *8*	0.992 *20*	1.42 *6*	6.59 *27*
$^{58}_{26}Fe_{32}$	810.784 *8*	0.1200 *40*	9.71 *32*	0.2586 *43*	4.23 *7*	1.098 *18*	1.57 *5*	7.81 *26*
$^{60}_{26}Fe_{34}$	823.63 *15*	0.096 *18*	11.6 *22*	0.225 *21*	3.68 *35*	0.98 *9*	1.21 *23*	6.4 *12*
$^{62}_{26}Fe_{36}$	876.8 *3*							
$^{56}_{28}Ni_{28}$	2700.6 *7*	0.060 *12*	0.049 *10*	0.173 *17*	3.05 *31*	0.77 *8*	2.8 *6*	11.1 *22*
$^{58}_{28}Ni_{30}$	1454.0 *1*	0.0695 *20*	0.904 *26*	0.1828 *26*	3.219 *46*	0.836 *12*	1.631 *47*	7.00 *20*

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Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{60}_{28}$Ni$_{32}$	1332.518 *5*	0.0933 *15*	1.041 *17*	0.2070 *17*	3.646 *29*	0.968 *8*	1.896 *30*	8.71 *14*
$^{62}_{28}$Ni$_{34}$	1172.91 *9*	0.0890 *25*	2.07 *6*	0.1978 *28*	3.484 *49*	0.946 *13*	1.507 *42*	7.39 *21*
$^{64}_{28}$Ni$_{36}$	1345.75 *5*	0.076 *8*	1.23 *13*	0.179 *9*	3.15 *17*	0.873 *46*	1.40 *15*	7.3 *8*
$^{66}_{28}$Ni$_{38}$	1425.1 *3*	0.062 *9*	1.13 *16*	0.158 *12*	2.78 *20*	0.79 *6*	1.15 *17*	6.4 *9*
$^{68}_{28}$Ni$_{40}$	2033.2 *2*	0.026 *6*	0.47 *11*	0.100 *12*	1.76 *21*	0.51 *6*	0.65 *15*	3.9 *9*
$^{70}_{28}$Ni$_{42}$	1259.6 *2*							
$^{60}_{30}$Zn$_{30}$	1004.1 *5*							
$^{62}_{30}$Zn$_{32}$	954.0 *4*	0.124 *9*	4.20 *30*	0.218 *8*	4.11 *15*	1.116 *41*	1.71 *12*	7.3 *5*
$^{64}_{30}$Zn$_{34}$	991.55 *5*	0.160 *15*	2.68 *25*	0.242 *11*	4.57 *21*	1.27 *6*	2.17 *20*	9.9 *9*
$^{66}_{30}$Zn$_{36}$	1039.39 *4*	0.135 *10*	2.50 *19*	0.218 *8*	4.11 *15*	1.164 *43*	1.83 *14*	8.8 *7*
$^{68}_{30}$Zn$_{38}$	1077.37 *4*	0.124 *15*	2.30 *28*	0.205 *12*	3.86 *23*	1.11 *7*	1.65 *20*	8.5 *10*
$^{70}_{30}$Zn$_{40}$	884.8 *1*	0.160 *14*	4.74 *42*	0.228 *10*	4.30 *19*	1.27 *6*	1.67 *15*	9.1 *8*
$^{72}_{30}$Zn$_{42}$	652.5 *3*							
$^{74}_{30}$Zn$_{44}$	605.82 *5*							
$^{76}_{30}$Zn$_{46}$	598.68 *10*							
$^{78}_{30}$Zn$_{48}$	729.6 *5*							
$^{64}_{32}$Ge$_{32}$	901.7 *3*							
$^{66}_{32}$Ge$_{34}$	957.00 *9*	0.099 *19*	5.3 *10*	0.174 *17*	3.51 *34*	0.99 *10*	1.23 *24*	5.2 *10*
$^{68}_{32}$Ge$_{36}$	1015.99 *8*	0.143 *21*	2.70 *40*	0.206 *15*	4.14 *31*	1.20 *9*	1.80 *26*	8.1 *12*
$^{70}_{32}$Ge$_{38}$	1039.25 *6*	0.1760 *40*	1.913 *44*	0.2245 *26*	4.52 *5*	1.330 *15*	2.158 *49*	10.32 *24*
$^{72}_{32}$Ge$_{40}$	834.011 *20*	0.213 *6*	4.75 *13*	0.2424 *34*	4.88 *7*	1.463 *21*	2.00 *6*	10.12 *29*
$^{74}_{32}$Ge$_{42}$	595.850 *6*	0.300 *6*	18.09 *36*	0.2825 *28*	5.68 *6*	1.737 *17*	1.922 *38*	10.28 *21*
$^{76}_{32}$Ge$_{44}$	562.93 *3*	0.268 *8*	26.9 *8*	0.2623 *39*	5.28 *8*	1.641 *25*	1.552 *46*	8.75 *26*
$^{78}_{32}$Ge$_{46}$	619.34 *13*							
$^{80}_{32}$Ge$_{48}$	659.15 *4*							
$^{82}_{32}$Ge$_{50}$	1348.04 *6*							
$^{68}_{34}$Se$_{34}$	854.2 *3*							
$^{70}_{34}$Se$_{36}$	944.6 *10*	0.38 *8*	1.50 *30*	0.309 *33*	6.6 *7*	1.94 *21*	4.2 *9*	18.0 *38*
$^{72}_{34}$Se$_{38}$	862.08 *9*	0.207 *25*	4.2 *5*	0.224 *14*	4.80 *29*	1.44 *9*	2.01 *24*	9.0 *11*
$^{74}_{34}$Se$_{40}$	634.75 *7*	0.387 *8*	10.22 *22*	0.3019 *31*	6.46 *7*	1.972 *20*	2.64 *5*	12.51 *26*
$^{76}_{34}$Se$_{42}$	559.102 *5*	0.420 *10*	17.76 *42*	0.3090 *37*	6.61 *8*	2.055 *24*	2.42 *6*	12.07 *29*
$^{78}_{34}$Se$_{44}$	613.727 *3*	0.335 *9*	13.98 *38*	0.2712 *36*	5.80 *8*	1.835 *25*	2.03 *5*	10.66 *29*
$^{80}_{34}$Se$_{46}$	666.16 *8*	0.253 *6*	12.29 *30*	0.2318 *27*	4.96 *6*	1.595 *19*	1.591 *38*	8.81 *21*
$^{82}_{34}$Se$_{48}$	654.69 *16*	0.182 *5*	18.6 *5*	0.1934 *27*	4.13 *6*	1.353 *19*	1.080 *30*	6.28 *17*
$^{84}_{34}$Se$_{50}$	1454.42 *9*							
$^{86}_{34}$Se$_{52}$	704.1 *10*							
$^{72}_{36}$Kr$_{36}$	709.1 *3*							
$^{74}_{36}$Kr$_{38}$	455.80 *10*	0.84 *10*	25.0 *30*	0.419 *25*	9.5 *6*	2.90 *17*	4.12 *49*	17.4 *21*
$^{76}_{36}$Kr$_{40}$	423.96 *7*	0.824 *24*	36.0 *10*	0.409 *6*	9.25 *13*	2.878 *42*	3.59 *11*	16.01 *47*
$^{78}_{36}$Kr$_{42}$	455.04 *3*	0.633 *39*	33.0 *20*	0.352 *11*	7.97 *25*	2.52 *8*	2.84 *17*	13.3 *8*
$^{80}_{36}$Kr$_{44}$	616.61 *9*	0.370 *21*	12.4 *7*	0.265 *8*	5.99 *17*	1.93 *5*	2.15 *12*	10.6 *6*
$^{82}_{36}$Kr$_{46}$	776.521 *3*	0.223 *10*	6.49 *29*	0.2021 *45*	4.58 *10*	1.497 *34*	1.57 *7*	8.14 *37*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{84}_{36}$Kr$_{48}$	881.615 *3*	0.125 *6*	6.14 *29*	0.1489 *36*	3.37 *8*	1.121 *27*	0.959 *46*	5.22 *25*
$^{86}_{36}$Kr$_{50}$	1564.87 *9*	0.122 *10*	0.359 *30*	0.145 *6*	3.28 *13*	1.107 *45*	1.60 *13*	9.1 *7*
$^{88}_{36}$Kr$_{52}$	775.31 *4*							
$^{90}_{36}$Kr$_{54}$	707.13 *5*							
$^{92}_{36}$Kr$_{56}$	769 *2*							
$^{94}_{36}$Kr$_{58}$	665 *2*							
$^{76}_{38}$Sr$_{38}$	260.9 *2*							
$^{78}_{38}$Sr$_{40}$	278.5 *10*	1.08 *15*	224 *27*	0.435 *30*	10.4 *7*	3.29 *23*	2.96 *42*	12.5 *18*
$^{80}_{38}$Sr$_{42}$	385.86 *4*	0.959 *36*	49.4 *18*	0.404 *8*	9.65 *18*	3.10 *6*	3.49 *13*	15.5 *6*
$^{82}_{38}$Sr$_{44}$	573.54 *8*	0.513 *20*	12.8 *5*	0.290 *6*	6.94 *14*	2.271 *44*	2.67 *10*	12.42 *49*
$^{84}_{38}$Sr$_{46}$	793.30 *9*	0.289 *44*	4.6 *7*	0.214 *16*	5.11 *39*	1.70 *13*	2.00 *30*	9.8 *15*
$^{86}_{38}$Sr$_{48}$	1076.68 *4*	0.128 *14*	2.23 *24*	0.140 *8*	3.35 *18*	1.13 *6*	1.15 *13*	5.9 *6*
$^{88}_{38}$Sr$_{50}$	1836.087 *9*	0.092 *5*	0.213 *12*	0.1173 *32*	2.80 *8*	0.961 *26*	1.36 *7*	7.30 *40*
$^{90}_{38}$Sr$_{52}$	831.68 *4*	0.113 *34*	10.0 *30*	0.127 *20*	3.03 *47*	1.05 *16*	0.73 *22*	4.1 *12*
$^{92}_{38}$Sr$_{54}$	814.98 *4*	0.114 *48*	12 *5*	0.124 *27*	3.0 *7*	1.05 *23*	0.70 *29*	4.1 *17*
$^{94}_{38}$Sr$_{56}$	836.91 *10*	0.118 *47*	10.0 *40*	0.125 *26*	3.0 *6*	1.07 *22*	0.71 *28*	4.4 *17*
$^{96}_{38}$Sr$_{58}$	814.93 *8*	0.24 *14*	7.0 *40*	0.17 *5*	4.1 *13*	1.48 *48*	1.4 *8*	9 *5*
$^{98}_{38}$Sr$_{60}$	144.225 *6*	1.282 *39*	4040 *110*	0.408 *6*	9.74 *15*	3.59 *5*	1.245 *38*	8.28 *25*
$^{100}_{38}$Sr$_{62}$	129.7 *5*	1.42 *8*	5640 *230*	0.423 *12*	10.12 *29*	3.78 *11*	1.20 *7*	8.3 *5*
$^{102}_{38}$Sr$_{64}$	126.0 *3*							
$^{80}_{40}$Zr$_{40}$	289.9 *3*							
$^{82}_{40}$Zr$_{42}$	407.30 *20*	0.91 *9*	40.0 *40*	0.367 *18*	9.24 *46*	3.02 *15*	3.36 *33*	14.1 *14*
$^{84}_{40}$Zr$_{44}$	540.0 *3*	0.438 *25*	20.3 *11*	0.251 *7*	6.31 *18*	2.10 *6*	2.06 *12*	9.1 *5*
$^{86}_{40}$Zr$_{46}$	751.75 *3*	0.166 *31*	10.6 *20*	0.151 *14*	3.81 *36*	1.29 *12*	1.04 *20*	4.8 *9*
$^{88}_{40}$Zr$_{48}$	1057.03 *4*	0.26 *8*	1.33 *43*	0.185 *29*	4.7 *7*	1.60 *25*	2.2 *7*	10.7 *33*
$^{90}_{40}$Zr$_{50}$	2186.274 *15*	0.0610 *40*	0.135 *9*	0.0894 *29*	2.25 *7*	0.783 *26*	1.03 *7*	5.24 *34*
$^{92}_{40}$Zr$_{52}$	934.49 *5*	0.083 *6*	6.9 *5*	0.1027 *37*	2.58 *9*	0.913 *33*	0.580 *42*	3.07 *22*
$^{94}_{40}$Zr$_{54}$	918.75 *5*	0.066 *14*	9.9 *21*	0.090 *10*	2.26 *24*	0.81 *9*	0.44 *9*	2.4 *5*
$^{96}_{40}$Zr$_{56}$	1750.498 *16*	0.055 *22*	0.54 *21*	0.080 *17*	2.00 *42*	0.73 *15*	0.67 *27*	3.9 *15*
$^{98}_{40}$Zr$_{58}$	1222.93 *12*							
$^{100}_{40}$Zr$_{60}$	212.530 *9*	1.11 *6*	790 *40*	0.355 *10*	8.94 *24*	3.34 *9*	1.54 *8*	9.6 *5*
$^{102}_{40}$Zr$_{62}$	151.77 *13*	1.66 *34*	2600 *500*	0.427 *44*	10.7 *11*	4.06 *42*	1.59 *33*	10.3 *21*
$^{104}_{40}$Zr$_{64}$	140.3 *10*							
$^{84}_{42}$Mo$_{42}$	443.8 *3*							
$^{86}_{42}$Mo$_{44}$	566.6 *4*							
$^{88}_{42}$Mo$_{46}$	740.53 *5*							
$^{90}_{42}$Mo$_{48}$	947.97 *9*							
$^{92}_{42}$Mo$_{50}$	1509.49 *3*	0.097 *6*	0.539 *33*	0.1058 *33*	2.79 *9*	0.987 *31*	1.10 *7*	5.26 *33*
$^{94}_{42}$Mo$_{52}$	871.096 *18*	0.2030 *40*	4.00 *8*	0.1509 *15*	3.987 *39*	1.428 *14*	1.276 *25*	6.39 *13*
$^{96}_{42}$Mo$_{54}$	778.245 *12*	0.271 *5*	5.27 *10*	0.1720 *16*	4.542 *42*	1.651 *15*	1.470 *27*	7.68 *14*
$^{98}_{42}$Mo$_{56}$	787.384 *13*	0.267 *9*	5.05 *17*	0.1683 *28*	4.45 *7*	1.638 *28*	1.415 *48*	7.71 *26*
$^{100}_{42}$Mo$_{58}$	535.57 *3*	0.516 *10*	17.89 *35*	0.2309 *22*	6.10 *6*	2.277 *22*	1.799 *35*	10.20 *20*
$^{102}_{42}$Mo$_{60}$	296.597 *12*	0.963 *31*	180 *6*	0.311 *5*	8.22 *13*	3.11 *5*	1.80 *6*	10.61 *34*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{104}_{42}Mo_{62}$	192.3 *2*	1.34 *8*	1040 *60*	0.362 *11*	9.57 *29*	3.67 *11*	1.57 *10*	9.6 *6*
$^{106}_{42}Mo_{64}$	171.548 *8*	1.31 *7*	1800 *100*	0.354 *9*	9.35 *25*	3.63 *10*	1.33 *7*	8.46 *45*
$^{108}_{42}Mo_{66}$	192.9 *10*	1.6 *5*	940 *270*	0.38 *6*	10.1 *16*	4.0 *6*	1.8 *6*	11.7 *37*
$^{88}_{44}Ru_{44}$	616 *2*							
$^{90}_{44}Ru_{46}$	738.1 *10*							
$^{92}_{44}Ru_{48}$	864.6 *10*							
$^{94}_{44}Ru_{50}$	1430.51 *22*							
$^{96}_{44}Ru_{52}$	832.57 *5*	0.251 *10*	4.07 *16*	0.1579 *31*	4.37 *9*	1.588 *32*	1.46 *6*	6.93 *28*
$^{98}_{44}Ru_{54}$	652.44 *4*	0.392 *12*	8.79 *27*	0.1947 *30*	5.39 *8*	1.985 *30*	1.72 *5*	8.54 *26*
$^{100}_{44}Ru_{56}$	539.506 *5*	0.490 *5*	18.15 *19*	0.2148 *11*	5.944 *30*	2.219 *11*	1.721 *18*	8.89 *9*
$^{102}_{44}Ru_{58}$	475.079 *24*	0.630 *10*	26.61 *43*	0.2404 *19*	6.65 *5*	2.517 *20*	1.885 *30*	10.13 *16*
$^{104}_{44}Ru_{60}$	358.02 *7*	0.820 *12*	83.4 *13*	0.2707 *20*	7.49 *5*	2.871 *21*	1.790 *27*	10.00 *15*
$^{106}_{44}Ru_{62}$	270.07 *4*	0.77 *20*	380 *100*	0.257 *34*	7.1 *9*	2.76 *36*	1.23 *32*	7.1 *19*
$^{108}_{44}Ru_{64}$	242.24 *7*	1.01 *15*	470 *70*	0.292 *22*	8.1 *6*	3.18 *24*	1.40 *21*	8.4 *13*
$^{110}_{44}Ru_{66}$	240.71 *10*	1.05 *12*	460 *50*	0.295 *17*	8.15 *47*	3.24 *19*	1.40 *16*	8.8 *10*
$^{112}_{44}Ru_{68}$	236.66 *17*	1.17 *23*	460 *90*	0.306 *30*	8.5 *8*	3.41 *34*	1.49 *29*	9.7 *19*
$^{114}_{44}Ru_{70}$	127.0 *10*							
$^{94}_{46}Pd_{48}$	814 *2*							
$^{96}_{46}Pd_{50}$	1415.4 *10*							
$^{98}_{46}Pd_{52}$	863.1 *3*							
$^{100}_{46}Pd_{54}$	665.56 *15*							
$^{102}_{46}Pd_{56}$	556.43 *4*	0.460 *30*	16.6 *11*	0.196 *6*	5.68 *19*	2.15 *7*	1.61 *11*	7.9 *5*
$^{104}_{46}Pd_{58}$	555.81 *4*	0.535 *35*	14.4 *9*	0.209 *7*	6.05 *20*	2.32 *8*	1.81 *12*	9.3 *6*
$^{106}_{46}Pd_{60}$	511.851 *23*	0.660 *35*	17.6 *9*	0.229 *6*	6.63 *18*	2.57 *7*	2.00 *11*	10.6 *6*
$^{108}_{46}Pd_{62}$	433.938 *5*	0.760 *40*	34.7 *18*	0.243 *6*	7.03 *19*	2.76 *7*	1.89 *10*	10.4 *5*
$^{110}_{46}Pd_{64}$	373.81 *6*	0.870 *40*	63.5 *30*	0.257 *6*	7.43 *17*	2.96 *7*	1.81 *8*	10.33 *48*
$^{112}_{46}Pd_{66}$	348.79 *17*	0.66 *11*	121 *20*	0.220 *18*	6.4 *5*	2.57 *22*	1.24 *21*	7.4 *12*
$^{114}_{46}Pd_{68}$	332.50 *24*	0.38 *12*	290 *90*	0.164 *27*	4.7 *8*	1.93 *31*	0.66 *21*	4.1 *13*
$^{116}_{46}Pd_{70}$	340.6 *3*	0.62 *18*	153 *43*	0.207 *31*	6.0 *9*	2.47 *37*	1.07 *31*	6.8 *20*
$^{118}_{46}Pd_{72}$	378.4 *2*							
$^{98}_{48}Cd_{50}$	1394.7 *3*							
$^{100}_{48}Cd_{52}$	1004.5 *3*							
$^{102}_{48}Cd_{54}$	776.55 *14*							
$^{104}_{48}Cd_{56}$	658.0 *2*	0.41 *11*	8.8 *25*	0.174 *24*	5.2 *7*	2.01 *27*	1.65 *44*	7.7 *21*
$^{106}_{48}Cd_{58}$	632.64 *4*	0.410 *20*	9.81 *48*	0.1732 *42*	5.23 *13*	2.03 *5*	1.53 *7*	7.47 *36*
$^{108}_{48}Cd_{60}$	632.986 *16*	0.430 *20*	9.33 *44*	0.1752 *41*	5.29 *12*	2.079 *48*	1.56 *7*	7.89 *37*
$^{110}_{48}Cd_{62}$	657.7638 *1*	0.450 *20*	7.36 *33*	0.1770 *39*	5.34 *12*	2.126 *47*	1.64 *7*	8.63 *38*
$^{112}_{48}Cd_{64}$	617.520 *10*	0.510 *20*	8.89 *35*	0.1862 *37*	5.62 *11*	2.264 *44*	1.70 *7*	9.24 *36*
$^{114}_{48}Cd_{66}$	558.456 *2*	0.545 *20*	13.7 *5*	0.1903 *35*	5.74 *11*	2.340 *43*	1.59 *6*	8.98 *33*
$^{116}_{48}Cd_{68}$	513.490 *15*	0.560 *20*	20.3 *7*	0.1906 *34*	5.76 *10*	2.372 *42*	1.46 *5*	8.54 *31*
$^{118}_{48}Cd_{70}$	487.77 *8*	0.568 *44*	26.0 *20*	0.190 *7*	5.73 *22*	2.39 *9*	1.37 *11*	8.3 *6*
$^{120}_{48}Cd_{72}$	505.9 *2*	0.48 *6*	26.0 *30*	0.172 *11*	5.20 *33*	2.19 *14*	1.17 *15*	7.3 *9*
$^{122}_{48}Cd_{74}$	569.45 *8*	0.58 *27*	15 *7*	0.182 *45*	5.5 *14*	2.3 *6*	1.5 *7*	10.0 *46*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{124}_{48}Cd_{76}$	613.33 *18*							
$^{126}_{48}Cd_{78}$	652 *2*							
$^{102}_{50}Sn_{52}$	1472.0 *20*							
$^{104}_{50}Sn_{54}$	1260.1 *3*							
$^{106}_{50}Sn_{56}$	1207.7 *5*							
$^{108}_{50}Sn_{58}$	1206.07 *10*							
$^{110}_{50}Sn_{60}$	1211.89 *15*							
$^{112}_{50}Sn_{62}$	1256.85 *7*	0.240 *14*	0.544 *32*	0.1226 *36*	3.86 *11*	1.553 *45*	1.63 *9*	8.16 *48*
$^{114}_{50}Sn_{64}$	1299.92 *7*	0.24 *5*	0.48 *10*	0.121 *13*	3.79 *40*	1.54 *16*	1.63 *34*	8.5 *18*
$^{116}_{50}Sn_{66}$	1293.560 *8*	0.209 *6*	0.539 *15*	0.1118 *16*	3.52 *5*	1.449 *21*	1.374 *39*	7.40 *21*
$^{118}_{50}Sn_{68}$	1229.666 *16*	0.209 *8*	0.695 *27*	0.1105 *21*	3.48 *7*	1.449 *28*	1.270 *49*	7.07 *27*
$^{120}_{50}Sn_{70}$	1171.34 *19*	0.2020 *40*	0.916 *19*	0.1075 *11*	3.380 *33*	1.425 *14*	1.137 *23*	6.55 *13*
$^{122}_{50}Sn_{72}$	1140.55 *3*	0.1920 *40*	1.101 *23*	0.1036 *11*	3.259 *34*	1.389 *14*	1.023 *21*	6.09 *13*
$^{124}_{50}Sn_{74}$	1131.739 *17*	0.1660 *40*	1.324 *32*	0.0953 *11*	2.997 *36*	1.292 *16*	0.855 *21*	5.26 *13*
$^{126}_{50}Sn_{76}$	1141.15 *4*							
$^{128}_{50}Sn_{78}$	1168.83 *4*							
$^{130}_{50}Sn_{80}$	1221.26 *5*							
$^{132}_{50}Sn_{82}$	4041.1 *4*							
$^{134}_{50}Sn_{84}$	725 *2*							
$^{108}_{52}Te_{56}$	625.4 *10*							
$^{110}_{52}Te_{58}$	657.7 *2*							
$^{112}_{52}Te_{60}$	689.01 *20*							
$^{114}_{52}Te_{62}$	708.9 *2*							
$^{116}_{52}Te_{64}$	678.92 *3*							
$^{118}_{52}Te_{66}$	605.706 *20*							
$^{120}_{52}Te_{68}$	560.438 *20*	0.77 *16*	10.0 *21*	0.201 *21*	6.6 *7*	2.77 *29*	2.07 *43*	11.0 *23*
$^{122}_{52}Te_{70}$	564.117 *14*	0.660 *6*	10.76 *10*	0.1847 *8*	6.042 *27*	2.576 *12*	1.740 *16*	9.58 *9*
$^{124}_{52}Te_{72}$	602.731 *3*	0.568 *6*	8.99 *10*	0.1695 *9*	5.545 *29*	2.390 *13*	1.557 *16*	8.85 *9*
$^{126}_{52}Te_{74}$	666.338 *12*	0.475 *10*	6.52 *14*	0.1534 *16*	5.02 *5*	2.185 *23*	1.402 *30*	8.23 *17*
$^{128}_{52}Te_{76}$	743.30 *10*	0.383 *6*	4.68 *8*	0.1363 *11*	4.458 *35*	1.962 *15*	1.228 *19*	7.44 *12*
$^{130}_{52}Te_{78}$	839.494 *17*	0.295 *7*	3.31 *8*	0.1184 *14*	3.872 *46*	1.722 *20*	1.041 *25*	6.51 *15*
$^{132}_{52}Te_{80}$	973.90 *10*							
$^{134}_{52}Te_{82}$	1279.04 *10*							
$^{136}_{52}Te_{84}$	605.91 *10*							
$^{138}_{52}Te_{86}$	443.1 *10*							
$^{112}_{54}Xe_{58}$	466 *2*							
$^{114}_{54}Xe_{60}$	449.7 *2*	0.93 *6*	23.8 *16*	0.221 *7*	7.50 *24*	3.06 *10*	2.19 *14*	9.8 *6*
$^{116}_{54}Xe_{62}$	393.5 *10*	1.21 *6*	35.1 *13*	0.249 *6*	8.46 *21*	3.49 *9*	2.42 *13*	11.2 *6*
$^{118}_{54}Xe_{64}$	337.32 *13*	1.40 *7*	65.0 *30*	0.265 *7*	9.00 *23*	3.75 *9*	2.33 *12*	11.1 *6*
$^{120}_{54}Xe_{66}$	322.4 *1*	1.73 *11*	66.0 *40*	0.291 *9*	9.89 *31*	4.17 *13*	2.68 *17*	13.2 *8*
$^{122}_{54}Xe_{68}$	331.18 *15*	1.40 *6*	71.0 *30*	0.259 *6*	8.80 *19*	3.75 *8*	2.17 *9*	11.06 *48*
$^{124}_{54}Xe_{70}$	354.14 *4*	0.96 *6*	75 *5*	0.212 *7*	7.21 *23*	3.11 *10*	1.55 *10*	8.2 *5*
$^{126}_{54}Xe_{72}$	388.634 *10*	0.770 *25*	58.8 *19*	0.1881 *31*	6.39 *10*	2.782 *45*	1.325 *43*	7.22 *23*
$^{128}_{54}Xe_{74}$	442.910 *9*	0.750 *40*	31.6 *17*	0.1836 *49*	6.24 *17*	2.74 *7*	1.43 *8*	8.05 *43*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{130}_{54}Xe_{76}$	536.085 *22*	0.65 *5*	14.2 *11*	0.169 *7*	5.74 *22*	2.55 *10*	1.46 *11*	8.5 *7*
$^{132}_{54}Xe_{78}$	667.720 *3*	0.460 *30*	6.68 *44*	0.1409 *46*	4.78 *16*	2.15 *7*	1.26 *8*	7.52 *49*
$^{134}_{54}Xe_{80}$	847.041 *23*	0.34 *6*	2.8 *5*	0.119 *11*	4.06 *36*	1.84 *16*	1.15 *20*	7.1 *13*
$^{136}_{54}Xe_{82}$	1313.028 *10*	0.36 *6*	0.30 *5*	0.122 *10*	4.14 *35*	1.90 *16*	1.84 *31*	11.7 *19*
$^{138}_{54}Xe_{84}$	588.825 *18*							
$^{140}_{54}Xe_{86}$	376.658 *15*	0.324 *14*	163 *7*	0.1137 *25*	3.86 *8*	1.804 *39*	0.453 *20*	3.05 *13*
$^{142}_{54}Xe_{88}$	287.1 *2*							
$^{144}_{54}Xe_{90}$	252.6 *10*							
$^{118}_{56}Ba_{62}$	194. *2*							
$^{120}_{56}Ba_{64}$	183.0 *5*							
$^{122}_{56}Ba_{66}$	196.1 *3*	2.81 *28*	428 *39*	0.354 *18*	12.5 *6*	5.31 *27*	2.58 *26*	12.2 *12*
$^{124}_{56}Ba_{68}$	229.89 *10*	2.09 *10*	275 *12*	0.302 *7*	10.63 *25*	4.58 *11*	2.19 *11*	10.7 *5*
$^{126}_{56}Ba_{70}$	256.09 *7*	1.75 *9*	198 *10*	0.273 *7*	9.63 *25*	4.19 *11*	1.98 *10*	10.0 *5*
$^{128}_{56}Ba_{72}$	284.09 *8*	1.48 *7*	142 *6*	0.249 *6*	8.76 *21*	3.86 *9*	1.81 *9*	9.48 *45*
$^{130}_{56}Ba_{74}$	357.38 *8*	1.163 *16*	58.7 *9*	0.2183 *15*	7.69 *5*	3.419 *24*	1.747 *24*	9.42 *13*
$^{132}_{56}Ba_{76}$	464.588 *24*	0.86 *6*	21.8 *15*	0.186 *6*	6.54 *23*	2.94 *10*	1.64 *11*	9.1 *6*
$^{134}_{56}Ba_{78}$	604.7230 *19*	0.658 *7*	7.62 *8*	0.1609 *9*	5.667 *30*	2.572 *14*	1.590 *17*	9.11 *10*
$^{136}_{56}Ba_{80}$	818.515 *12*	0.410 *8*	2.70 *5*	0.1258 *12*	4.429 *43*	2.030 *20*	1.309 *26*	7.72 *15*
$^{138}_{56}Ba_{82}$	1435.818 *10*	0.230 *9*	0.291 *11*	0.0933 *18*	3.28 *6*	1.520 *30*	1.257 *49*	7.63 *30*
$^{140}_{56}Ba_{84}$	602.35 *3*	0.45 *19*	14 *6*	0.126 *28*	4.4 *10*	2.08 *46*	1.01 *43*	6.3 *27*
$^{142}_{56}Ba_{86}$	359.597 *14*	0.699 *37*	95 *5*	0.1595 *42*	5.62 *15*	2.65 *7*	0.912 *48*	5.86 *31*
$^{144}_{56}Ba_{88}$	199.326 *5*	1.05 *6*	1060 *60*	0.194 *6*	6.82 *20*	3.25 *9*	0.742 *42*	4.91 *28*
$^{146}_{56}Ba_{90}$	181.05 *5*	1.355 *48*	1250 *40*	0.2180 *39*	7.68 *14*	3.69 *7*	0.850 *30*	5.78 *21*
$^{148}_{56}Ba_{92}$	141.7 *10*							
$^{124}_{58}Ce_{66}$	142.0 *10*	3.7 *9*	1270 *280*	0.385 *48*	14.0 *17*	6.1 *7*	2.4 *6*	10.9 *27*
$^{126}_{58}Ce_{68}$	169.59 *3*	2.68 *48*	850 *150*	0.325 *29*	11.9 *11*	5.17 *47*	2.01 *36*	9.5 *17*
$^{128}_{58}Ce_{70}$	207.3 *10*	2.28 *22*	405 *30*	0.298 *14*	10.9 *5*	4.78 *23*	2.04 *21*	9.9 *10*
$^{130}_{58}Ce_{72}$	253.99 *19*	1.74 *10*	206 *11*	0.258 *7*	9.40 *27*	4.18 *12*	1.86 *11*	9.3 *5*
$^{132}_{58}Ce_{74}$	325.54 *16*	1.87 *17*	58 *5*	0.264 *12*	9.64 *44*	4.33 *20*	2.50 *23*	12.9 *12*
$^{134}_{58}Ce_{76}$	409.12 *10*	1.04 *9*	34.0 *30*	0.195 *8*	7.12 *31*	3.23 *14*	1.70 *15*	9.1 *8*
$^{136}_{58}Ce_{78}$	552.20 *11*	0.81 *9*	9.8 *11*	0.170 *9*	6.22 *35*	2.85 *16*	1.74 *19*	9.6 *11*
$^{138}_{58}Ce_{80}$	788.744 *8*	0.450 *30*	2.97 *20*	0.1259 *42*	4.59 *15*	2.13 *7*	1.35 *9*	7.6 *5*
$^{140}_{58}Ce_{82}$	1596.227 *25*	0.298 *6*	0.1321 *27*	0.1015 *10*	3.704 *37*	1.731 *17*	1.767 *36*	10.30 *21*
$^{142}_{58}Ce_{84}$	641.286 *9*	0.480 *6*	7.80 *10*	0.1277 *8*	4.657 *29*	2.197 *14*	1.117 *14*	6.70 *8*
$^{144}_{58}Ce_{86}$	397.441 *9*	0.83 *9*	49 *5*	0.166 *9*	6.06 *33*	2.88 *16*	1.17 *13*	7.2 *8*
$^{146}_{58}Ce_{88}$	258.46 *3*	1.14 *12*	290 *30*	0.193 *10*	7.04 *37*	3.38 *18*	1.02 *11*	6.5 *7*
$^{148}_{58}Ce_{90}$	158.468 *5*	1.96 *18*	1500 *130*	0.251 *12*	9.14 *42*	4.43 *20*	1.05 *10*	6.8 *6*
$^{150}_{58}Ce_{92}$	97.1 *10*	3.3 *8*	4700 *1000*	0.320 *39*	11.7 *14*	5.7 *7*	1.06 *27*	7.1 *18*
$^{152}_{58}Ce_{94}$	81.7 *10*							
$^{128}_{60}Nd_{68}$	133.66 *7*							
$^{130}_{60}Nd_{70}$	158 *2*	4.1 *18*	860 *350*	0.37 *9*	14.1 *33*	6.3 *14*	2.7 *12*	13 *6*
$^{132}_{60}Nd_{72}$	212.62 *18*	3.5 *6*	240 *40*	0.349 *30*	13.2 *11*	5.9 *5*	3.1 *5*	14.8 *25*
$^{134}_{60}Nd_{74}$	294.30 *16*	1.83 *37*	100 *20*	0.249 *25*	9.4 *10*	4.27 *44*	2.15 *44*	10.7 *22*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{136}_{60}Nd_{76}$	373.6 *3*							
$^{138}_{60}Nd_{78}$	520.1 *3*							
$^{140}_{60}Nd_{80}$	773.73 *6*							
$^{142}_{60}Nd_{82}$	1575.83 *15*	0.265 *6*	0.1584 *37*	0.0917 *10*	3.460 *39*	1.632 *18*	1.515 *34*	8.49 *19*
$^{144}_{60}Nd_{84}$	696.513 *5*	0.491 *5*	5.04 *5*	0.1237 *6*	4.666 *24*	2.222 *11*	1.212 *12*	6.98 *7*
$^{146}_{60}Nd_{86}$	453.77 *5*	0.760 *25*	27.5 *9*	0.1524 *25*	5.75 *9*	2.764 *45*	1.195 *39*	7.07 *23*
$^{148}_{60}Nd_{88}$	301.702 *16*	1.35 *5*	115.2 *44*	0.2013 *37*	7.60 *14*	3.68 *7*	1.38 *5*	8.39 *31*
$^{150}_{60}Nd_{90}$	130.21 *8*	2.760 *40*	2139 *45*	0.2853 *21*	10.77 *8*	5.267 *38*	1.190 *18*	7.44 *11*
$^{152}_{60}Nd_{92}$	72.51 *19*	4.20 *28*	6060 *330*	0.349 *12*	13.16 *44*	6.49 *22*	0.99 *7*	6.33 *44*
$^{154}_{60}Nd_{94}$	70.8 *1*							
$^{156}_{60}Nd_{96}$	66.9 *10*							
$^{130}_{62}Sm_{68}$	122 *3*							
$^{132}_{62}Sm_{70}$	131 *2*							
$^{134}_{62}Sm_{72}$	163 *2*	4.2 *6*	600 *50*	0.366 *26*	14.3 *10*	6.48 *47*	2.74 *42*	12.8 *20*
$^{136}_{62}Sm_{74}$	254.91 *16*	2.73 *27*	128 *12*	0.293 *15*	11.4 *6*	5.23 *26*	2.71 *27*	13.1 *13*
$^{138}_{62}Sm_{76}$	346.9 *3*	1.41 *23*	57 *9*	0.208 *17*	8.1 *7*	3.75 *31*	1.86 *31*	9.2 *15*
$^{140}_{62}Sm_{78}$	530.7 *1*							
$^{142}_{62}Sm_{80}$	768.0 *2*							
$^{144}_{62}Sm_{82}$	1660.2 *4*	0.262 *6*	0.1235 *30*	0.0874 *10*	3.408 *39*	1.623 *19*	1.542 *36*	8.32 *19*
$^{146}_{62}Sm_{84}$	747.115 *13*							
$^{148}_{62}Sm_{86}$	550.265 *23*	0.720 *30*	11.14 *47*	0.1423 *30*	5.55 *12*	2.69 *6*	1.34 *6*	7.65 *32*
$^{150}_{62}Sm_{88}$	333.863 *9*	1.350 *30*	70.1 *16*	0.1931 *21*	7.53 *8*	3.684 *41*	1.493 *33*	8.74 *19*
$^{152}_{62}Sm_{90}$	121.7817 *2*	3.46 *6*	2060 *25*	0.3064 *27*	11.95 *10*	5.90 *5*	1.365 *24*	8.20 *14*
$^{154}_{62}Sm_{92}$	81.976 *18*	4.36 *5*	4360 *90*	0.3410 *20*	13.30 *8*	6.620 *38*	1.133 *13*	6.99 *8*
$^{156}_{62}Sm_{94}$	75.89 *5*							
$^{158}_{62}Sm_{96}$	72.8 *10*							
$^{160}_{62}Sm_{98}$	70.6 *10*							
$^{138}_{64}Gd_{74}$	220.90 *18*							
$^{140}_{64}Gd_{76}$	328.6 *10*							
$^{142}_{64}Gd_{78}$	515.3 *1*							
$^{144}_{64}Gd_{80}$	743.0 *10*							
$^{146}_{64}Gd_{82}$	1971.97 *22*							
$^{148}_{64}Gd_{84}$	784.430 *16*							
$^{150}_{64}Gd_{86}$	638.045 *14*							
$^{152}_{64}Gd_{88}$	344.2789 *11*	1.67 *14*	49.0 *40*	0.206 *9*	8.29 *35*	4.09 *17*	1.86 *16*	10.5 *9*
$^{154}_{64}Gd_{90}$	123.0714 *10*	3.89 *7*	1710 *20*	0.3120 *28*	12.56 *11*	6.25 *6*	1.518 *27*	8.79 *16*
$^{156}_{64}Gd_{92}$	88.9666 *14*	4.64 *5*	3270 *60*	0.3378 *18*	13.60 *7*	6.830 *37*	1.281 *14*	7.61 *8*
$^{158}_{64}Gd_{94}$	79.510 *2*	5.02 *5*	3730 *70*	0.3484 *17*	14.03 *7*	7.104 *35*	1.212 *12*	7.39 *7*
$^{160}_{64}Gd_{96}$	75.26 *1*	5.25 *6*	3910 *80*	0.3534 *20*	14.22 *8*	7.265 *42*	1.175 *14*	7.34 *8*
$^{162}_{64}Gd_{98}$	71 *7*							
$^{142}_{66}Dy_{76}$	315.9 *4*							
$^{144}_{66}Dy_{78}$	492.5 *3*							
$^{146}_{66}Dy_{80}$	682.9 *3*							
$^{148}_{66}Dy_{82}$	1677.3 *10*							

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{150}_{66}Dy_{84}$	803.4 *5*							
$^{152}_{66}Dy_{86}$	613.81 *7*	0.43 *23*	15 *8*	0.097 *28*	4.0 *12*	2.0 *6*	0.86 *46*	4.5 *24*
$^{154}_{66}Dy_{88}$	334.58 *8*	2.39 *13*	39.0 *20*	0.237 *6*	9.84 *27*	4.90 *13*	2.53 *14*	13.8 *8*
$^{156}_{66}Dy_{90}$	137.83 *3*	3.710 *40*	1203 *19*	0.2929 *16*	12.16 *7*	6.107 *33*	1.586 *17*	8.86 *10*
$^{158}_{66}Dy_{92}$	98.9180 *10*	4.66 *5*	2440 *44*	0.3255 *17*	13.51 *7*	6.844 *37*	1.400 *15*	8.02 *9*
$^{160}_{66}Dy_{94}$	86.7882 *4*	5.13 *11*	2900 *40*	0.3387 *36*	14.06 *15*	7.18 *8*	1.324 *28*	7.78 *17*
$^{162}_{66}Dy_{96}$	80.660 *2*	5.35 *11*	3160 *40*	0.3430 *35*	14.24 *15*	7.33 *8*	1.257 *26*	7.57 *16*
$^{164}_{66}Dy_{98}$	73.392 *5*	5.60 *5*	3490 *60*	0.3481 *16*	14.45 *6*	7.503 *33*	1.173 *11*	7.24 *7*
$^{166}_{66}Dy_{100}$	76.587 *1*							
$^{144}_{68}Er_{76}$	330. *10*							
$^{146}_{68}Er_{78}$								
$^{148}_{68}Er_{80}$	646.6 *3*							
$^{150}_{68}Er_{82}$	1578.87 *18*							
$^{152}_{68}Er_{84}$	808.27 *10*							
$^{154}_{68}Er_{86}$	560.0 *10*							
$^{156}_{68}Er_{88}$	344.51 *6*	1.64 *7*	49.0 *20*	0.1890 *40*	8.08 *17*	4.06 *9*	1.75 *8*	9.23 *40*
$^{158}_{68}Er_{90}$	192.15 *3*	3.05 *24*	400 *30*	0.255 *10*	10.92 *43*	5.53 *22*	1.78 *14*	9.6 *8*
$^{160}_{68}Er_{92}$	125.8 *1*	4.38 *20*	1320 *50*	0.304 *7*	12.99 *30*	6.63 *15*	1.64 *8*	9.07 *42*
$^{162}_{68}Er_{94}$	102.04 *3*	5.01 *6*	1993 *40*	0.3222 *19*	13.78 *8*	7.097 *42*	1.489 *18*	8.45 *10*
$^{164}_{68}Er_{96}$	91.40 *2*	5.45 *6*	2303 *45*	0.3333 *18*	14.25 *8*	7.402 *41*	1.422 *16*	8.27 *9*
$^{166}_{68}Er_{98}$	80.577 *7*	5.83 *5*	2672 *47*	0.3420 *15*	14.62 *6*	7.656 *33*	1.314 *11*	7.83 *7*
$^{168}_{68}Er_{100}$	79.804 *1*	5.79 *10*	2730 *70*	0.3381 *29*	14.46 *12*	7.63 *7*	1.267 *22*	7.73 *13*
$^{170}_{68}Er_{102}$	78.591 *22*	5.82 *10*	2780 *70*	0.3363 *29*	14.38 *12*	7.65 *7*	1.230 *21*	7.69 *13*
$^{172}_{68}Er_{104}$	77.0 *4*							
$^{152}_{70}Yb_{82}$	1531.4 *5*							
$^{154}_{70}Yb_{84}$	821.3 *2*							
$^{156}_{70}Yb_{86}$	536.4 *1*							
$^{158}_{70}Yb_{88}$	358.2 *1*	1.87 *23*	36.1 *43*	0.194 *12*	8.5 *5*	4.33 *27*	2.03 *25*	10.4 *13*
$^{160}_{70}Yb_{90}$	243.1 *1*	2.66 *16*	159 *9*	0.230 *7*	10.12 *30*	5.17 *16*	1.92 *12*	10.0 *6*
$^{162}_{70}Yb_{92}$	166.85 *4*	3.53 *15*	600 *30*	0.263 *6*	11.56 *25*	5.96 *13*	1.72 *7*	9.19 *39*
$^{164}_{70}Yb_{94}$	123.36 *4*	4.38 *26*	1340 *70*	0.290 *9*	12.77 *38*	6.63 *20*	1.54 *9*	8.5 *5*
$^{166}_{70}Yb_{96}$	102.37 *3*	5.24 *31*	1780 *90*	0.315 *9*	13.86 *41*	7.25 *21*	1.50 *9*	8.4 *5*
$^{168}_{70}Yb_{98}$	87.73 *1*	5.58 *30*	2200 *70*	0.322 *9*	14.19 *38*	7.49 *20*	1.34 *7*	7.73 *42*
$^{170}_{70}Yb_{100}$	84.25474 *8*	5.79 *13*	2300 *30*	0.3258 *37*	14.34 *16*	7.63 *9*	1.312 *29*	7.74 *17*
$^{172}_{70}Yb_{102}$	78.7427 *5*	6.04 *7*	2430 *50*	0.3302 *19*	14.54 *8*	7.792 *45*	1.254 *15*	7.57 *9*
$^{174}_{70}Yb_{104}$	76.471 *1*	5.94 *6*	2570 *49*	0.3249 *16*	14.31 *7*	7.727 *39*	1.175 *12*	7.26 *7*
$^{176}_{70}Yb_{106}$	82.13 *2*	5.30 *19*	2610 *70*	0.305 *5*	13.41 *24*	7.30 *13*	1.105 *40*	6.98 *25*
$^{178}_{70}Yb_{108}$	84 *3*							
$^{154}_{72}Hf_{82}$	1513 *2*							
$^{156}_{72}Hf_{84}$	858 *2*							
$^{158}_{72}Hf_{86}$	476.36 *11*							
$^{160}_{72}Hf_{88}$	389.6 *10*							
$^{162}_{72}Hf_{90}$	285.0 *10*	1.35 *12*	148 *11*	0.158 *7*	7.15 *32*	3.68 *16*	1.12 *10*	5.7 *5*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{164}_{72}Hf_{92}$	211.05 *5*	2.14 *18*	370 *30*	0.197 *8*	8.92 *38*	4.63 *20*	1.29 *11*	6.7 *6*
$^{166}_{72}Hf_{94}$	158.5 *3*	3.50 *20*	717 *34*	0.250 *7*	11.33 *32*	5.93 *17*	1.55 *9*	8.25 *49*
$^{168}_{72}Hf_{96}$	124.0 *2*	4.30 *23*	1280 *50*	0.275 *7*	12.46 *33*	6.57 *18*	1.46 *8*	7.96 *44*
$^{170}_{72}Hf_{98}$	100.80 *17*	5.3 *12*	1770 *400*	0.301 *35*	13.6 *16*	7.3 *8*	1.44 *33*	8.0 *18*
$^{172}_{72}Hf_{100}$	95.22 *4*	4.47 *33*	2240 *140*	0.276 *10*	12.50 *46*	6.70 *25*	1.12 *8*	6.40 *48*
$^{174}_{72}Hf_{102}$	90.985 *19*	4.88 *31*	2210 *120*	0.286 *9*	12.96 *41*	7.00 *22*	1.15 *7*	6.71 *43*
$^{176}_{72}Hf_{104}$	88.351 *24*	5.27 *10*	2140 *60*	0.2953 *28*	13.37 *13*	7.28 *7*	1.181 *23*	7.06 *14*
$^{178}_{72}Hf_{106}$	93.180 *1*	4.82 *6*	2145 *44*	0.2803 *17*	12.69 *8*	6.961 *43*	1.118 *14*	6.84 *9*
$^{180}_{72}Hf_{108}$	93.326 *2*	4.67 *12*	2210 *40*	0.2738 *35*	12.40 *16*	6.85 *9*	1.065 *27*	6.66 *17*
$^{182}_{72}Hf_{110}$	97.79 *9*							
$^{184}_{72}Hf_{112}$	107.4 *5*							
$^{162}_{74}W_{88}$	450.2 *3*							
$^{164}_{74}W_{90}$	331.6 *3*							
$^{166}_{74}W_{92}$	251.7 *2*							
$^{168}_{74}W_{94}$	199.3 *2*	3.24 *18*	307 *15*	0.232 *6*	10.81 *30*	5.70 *16*	1.77 *10*	9.1 *5*
$^{170}_{74}W_{96}$	156.85 *14*	3.51 *10*	718 *14*	0.2400 *34*	11.17 *16*	5.94 *8*	1.480 *43*	7.81 *23*
$^{172}_{74}W_{98}$	123.2 *1*	5.02 *48*	1060 *90*	0.284 *14*	13.2 *6*	7.10 *34*	1.63 *16*	8.8 *8*
$^{174}_{74}W_{100}$	113.0 *1*	3.97 *28*	1650 *100*	0.251 *9*	11.69 *41*	6.31 *22*	1.16 *8*	6.41 *46*
$^{176}_{74}W_{102}$	109.08 *9*							
$^{178}_{74}W_{104}$	106.06 *22*							
$^{180}_{74}W_{106}$	103.557 *7*	4.25 *24*	1850 *90*	0.254 *7*	11.83 *33*	6.53 *18*	1.08 *6*	6.36 *36*
$^{182}_{74}W_{108}$	100.1060 *1*	4.20 *8*	1990 *20*	0.2508 *24*	11.67 *11*	6.50 *6*	1.009 *19*	6.10 *12*
$^{184}_{74}W_{110}$	111.208 *4*	3.78 *13*	1790 *50*	0.2362 *41*	10.99 *19*	6.16 *11*	0.990 *34*	6.12 *21*
$^{186}_{74}W_{112}$	122.33 *7*	3.50 *12*	1540 *40*	0.2257 *39*	10.50 *18*	5.93 *10*	0.991 *35*	6.26 *22*
$^{188}_{74}W_{114}$	143 *2*							
$^{190}_{74}W_{116}$	205. *2*							
$^{164}_{76}Os_{88}$	548.0 *9*							
$^{166}_{76}Os_{90}$	430.8 *9*							
$^{168}_{76}Os_{92}$	341.2 *2*							
$^{170}_{76}Os_{94}$	286.70 *14*							
$^{172}_{76}Os_{96}$	227.77 *9*	3.30 *23*	167 *10*	0.225 *8*	10.74 *37*	5.76 *20*	1.98 *14*	10.2 *7*
$^{174}_{76}Os_{98}$	158.7 *2*	4.7 *6*	500 *60*	0.266 *17*	12.7 *8*	6.86 *44*	1.93 *25*	10.1 *13*
$^{176}_{76}Os_{100}$	135.1 *4*							
$^{178}_{76}Os_{102}$	131.6 *3*							
$^{180}_{76}Os_{104}$	132.3 *3*	3.6 *8*	1210 *250*	0.226 *25*	10.8 *12*	6.0 *7*	1.16 *26*	6.5 *15*
$^{182}_{76}Os_{106}$	127.0 *1*	3.86 *35*	1200 *100*	0.234 *11*	11.2 *5*	6.22 *28*	1.18 *11*	6.7 *6*
$^{184}_{76}Os_{108}$	119.80 *9*	3.23 *16*	1650 *70*	0.213 *5*	10.16 *25*	5.70 *14*	0.912 *46*	5.34 *27*
$^{186}_{76}Os_{110}$	137.159 *8*	2.90 *10*	1280 *50*	0.2000 *34*	9.56 *16*	5.40 *9*	0.920 *32*	5.51 *19*
$^{188}_{76}Os_{112}$	155.021 *11*	2.55 *5*	992 *24*	0.1862 *18*	8.90 *9*	5.06 *5*	0.899 *18*	5.50 *11*
$^{190}_{76}Os_{114}$	186.718 *2*	2.35 *6*	541 *15*	0.1775 *23*	8.49 *11*	4.86 *6*	0.980 *25*	6.13 *16*
$^{192}_{76}Os_{116}$	205.79561 *6*	2.100 *30*	405 *7*	0.1667 *12*	7.97 *6*	4.595 *33*	0.949 *14*	6.05 *9*
$^{194}_{76}Os_{118}$	218.509 *6*							

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{196}_{76}Os_{120}$	300 *20*							
$^{168}_{78}Pt_{90}$	582.0 *20*							
$^{170}_{78}Pt_{92}$	509 *2*							
$^{172}_{78}Pt_{94}$	457 *2*							
$^{174}_{78}Pt_{96}$	394 *2*							
$^{176}_{78}Pt_{98}$	263.9 *10*	2.58 *28*	109 *10*	0.190 *10*	9.3 *5*	5.09 *28*	1.73 *19*	8.8 *10*
$^{178}_{78}Pt_{100}$	170.1 *10*							
$^{180}_{78}Pt_{102}$	152.23 *24*	4.81 *49*	540 *50*	0.256 *13*	12.6 *6*	6.94 *35*	1.79 *19*	9.5 *10*
$^{182}_{78}Pt_{104}$	154.9 *1*							
$^{184}_{78}Pt_{106}$	162.97 *8*	3.78 *27*	545 *35*	0.224 *8*	10.99 *39*	6.16 *22*	1.45 *10*	8.1 *6*
$^{186}_{78}Pt_{108}$	191.53 *4*	2.99 *13*	375 *14*	0.1979 *43*	9.71 *21*	5.48 *12*	1.33 *6*	7.54 *33*
$^{188}_{78}Pt_{110}$	265.63 *5*	2.69 *49*	104 *19*	0.186 *17*	9.1 *8*	5.18 *48*	1.62 *30*	9.4 *17*
$^{190}_{78}Pt_{112}$	295.80 *4*	1.75 *22*	95 *12*	0.149 *9*	7.31 *46*	4.19 *26*	1.16 *15*	6.9 *9*
$^{192}_{78}Pt_{114}$	316.50819 *1*	1.870 *40*	63.4 *14*	0.1532 *16*	7.52 *8*	4.336 *46*	1.299 *28*	7.87 *17*
$^{194}_{78}Pt_{116}$	328.453 *10*	1.642 *22*	60.5 *9*	0.1426 *10*	6.995 *47*	4.063 *27*	1.163 *16*	7.20 *10*
$^{196}_{78}Pt_{118}$	355.6841 *20*	1.375 *16*	49.2 *6*	0.1296 *8*	6.358 *37*	3.718 *22*	1.037 *12*	6.55 *8*
$^{198}_{78}Pt_{120}$	407.22 *5*	1.080 *12*	32.40 *39*	0.1141 *6*	5.597 *31*	3.295 *18*	0.917 *10*	5.91 *7*
$^{200}_{78}Pt_{122}$	470.10 *20*							
$^{176}_{80}Hg_{96}$	613.3 *20*							
$^{178}_{80}Hg_{98}$	558.3 *10*							
$^{180}_{80}Hg_{100}$	434.1 *10*							
$^{182}_{80}Hg_{102}$	351.8 *3*							
$^{184}_{80}Hg_{104}$	366.51 *23*	2.05 *49*	30 *7*	0.160 *19*	8.0 *10*	4.5 *5*	1.77 *42*	9.4 *22*
$^{186}_{80}Hg_{106}$	405.33 *14*	1.41 *24*	26.0 *43*	0.132 *11*	6.6 *6*	3.75 *32*	1.32 *23*	7.1 *12*
$^{188}_{80}Hg_{108}$	412.8 *1*							
$^{190}_{80}Hg_{110}$	416.4 *2*							
$^{192}_{80}Hg_{112}$	422.8 *1*							
$^{194}_{80}Hg_{114}$	428.0 *2*							
$^{196}_{80}Hg_{116}$	425.98 *10*	1.15 *5*	24.4 *11*	0.1155 *25*	5.81 *13*	3.40 *7*	1.039 *45*	6.24 *27*
$^{198}_{80}Hg_{118}$	411.80249 *1*	0.990 *12*	33.36 *42*	0.1065 *6*	5.358 *32*	3.155 *19*	0.850 *10*	5.21 *6*
$^{200}_{80}Hg_{120}$	367.944 *10*	0.853 *11*	67.0 *9*	0.0982 *6*	4.941 *32*	2.928 *19*	0.644 *8*	4.02 *5*
$^{202}_{80}Hg_{122}$	439.562 *10*	0.612 *10*	39.2 *7*	0.0826 *7*	4.157 *34*	2.480 *20*	0.543 *9*	3.46 *6*
$^{204}_{80}Hg_{124}$	436.552 *8*	0.427 *7*	58.1 *10*	0.0686 *6*	3.450 *28*	2.072 *17*	0.370 *6*	2.405 *39*
$^{206}_{80}Hg_{126}$	1068.54 *10*							
$^{182}_{82}Pb_{100}$	888.3 *3*							
$^{184}_{82}Pb_{102}$	701.5 *5*							
$^{186}_{82}Pb_{104}$	662.4 *10*							
$^{188}_{82}Pb_{106}$	723.9 *2*							
$^{190}_{82}Pb_{108}$	773.8 *5*							
$^{192}_{82}Pb_{110}$	853.6 *3*							
$^{194}_{82}Pb_{112}$	965.35 *10*							
$^{196}_{82}Pb_{114}$	1049.20 *9*							
$^{198}_{82}Pb_{116}$	1063.50 *20*							

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{200}_{82}Pb_{118}$	1026.62 *15*							
$^{202}_{82}Pb_{120}$	960.66 *4*							
$^{204}_{82}Pb_{122}$	899.171 *24*	0.1620 *40*	4.25 *11*	0.0412 *5*	2.125 *26*	1.276 *16*	0.289 *7*	1.789 *44*
$^{206}_{82}Pb_{124}$	803.10 *5*	0.1000 *20*	12.10 *25*	0.03216 *32*	1.659 *17*	1.003 *10*	0.1568 *31*	0.989 *20*
$^{208}_{82}Pb_{126}$	4085.4 *3*	0.300 *30*	0.00121 *12*	0.0553 *28*	2.85 *14*	1.73 *9*	2.35 *24*	15.1 *15*
$^{210}_{82}Pb_{128}$	799.7 *1*	0.051 *15*	27 *8*	0.0224 *34*	1.16 *17*	0.71 *11*	0.077 *23*	0.51 *15*
$^{212}_{82}Pb_{130}$	804.9 *5*							
$^{214}_{82}Pb_{132}$	836 *2*							
$^{192}_{84}Po_{108}$	262.0 *20*							
$^{194}_{84}Po_{110}$	318.6 *2*							
$^{196}_{84}Po_{112}$	463.12 *9*							
$^{198}_{84}Po_{114}$	605.0 *1*							
$^{200}_{84}Po_{116}$	665.90 *10*							
$^{202}_{84}Po_{118}$	677.30 *20*							
$^{204}_{84}Po_{120}$	684.342 *10*							
$^{206}_{84}Po_{122}$	700.66 *3*							
$^{208}_{84}Po_{124}$	686.528 *20*							
$^{210}_{84}Po_{126}$	1181.40 *2*	0.0200 *40*	9.2 *18*	0.0138 *14*	0.73 *7*	0.446 *45*	0.045 *9*	0.28 *6*
$^{212}_{84}Po_{128}$	727.330 *9*							
$^{214}_{84}Po_{130}$	609.316 *7*							
$^{216}_{84}Po_{132}$	549.76 *4*							
$^{218}_{84}Po_{134}$	511 *2*							
$^{198}_{86}Rn_{112}$	339.0 *20*							
$^{200}_{86}Rn_{114}$	432.9 *2*							
$^{202}_{86}Rn_{116}$	504.1 *3*							
$^{204}_{86}Rn_{118}$	542.9 *3*							
$^{206}_{86}Rn_{120}$	575.3 *1*							
$^{208}_{86}Rn_{122}$	635.8 *2*							
$^{210}_{86}Rn_{124}$	643.8 *1*							
$^{212}_{86}Rn_{126}$	1273.8 *2*							
$^{214}_{86}Rn_{128}$	694.7 *10*							
$^{216}_{86}Rn_{130}$	461.9 *2*							
$^{218}_{86}Rn_{132}$	324.22 *5*							
$^{220}_{86}Rn_{134}$	240.986 *6*	1.86 *7*	212 *7*	0.1266 *24*	6.85 *13*	4.32 *8*	0.784 *30*	5.13 *19*
$^{222}_{86}Rn_{136}$	186.211 *13*	2.37 *16*	462 *29*	0.1419 *48*	7.68 *26*	4.88 *16*	0.76 *5*	5.07 *34*
$^{206}_{88}Ra_{118}$	474.3 *10*							
$^{208}_{88}Ra_{120}$	520.2 *10*							
$^{210}_{88}Ra_{122}$	603.3 *10*							
$^{212}_{88}Ra_{124}$	629.3 *5*							
$^{214}_{88}Ra_{126}$	1382.4 *10*							
$^{216}_{88}Ra_{128}$	688.2 *2*							
$^{218}_{88}Ra_{130}$	389.1 *2*	1.10 *20*	40 *7*	0.095 *9*	5.28 *48*	3.31 *30*	0.76 *14*	4.7 *9*
$^{220}_{88}Ra_{132}$	178.47 *12*							

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{222}_{88}Ra_{134}$	111.12 *2*	4.54 *39*	750 *60*	0.192 *8*	10.62 *46*	6.75 *29*	0.87 *7*	5.53 *48*
$^{224}_{88}Ra_{136}$	84.373 *3*	3.99 *15*	1080 *30*	0.1790 *34*	9.91 *19*	6.33 *12*	0.571 *22*	3.70 *14*
$^{226}_{88}Ra_{138}$	67.67 *1*	5.15 *14*	907 *34*	0.2022 *27*	11.19 *15*	7.19 *10*	0.583 *16*	3.84 *11*
$^{228}_{88}Ra_{140}$	63.823 *20*	5.99 *28*	793 *29*	0.217 *5*	11.99 *28*	7.76 *18*	0.630 *30*	4.23 *20*
$^{230}_{88}Ra_{142}$	57.4 *1*							
$^{216}_{90}Th_{126}$	1478 *2*							
$^{218}_{90}Th_{128}$	689.6 *6*							
$^{220}_{90}Th_{130}$	373.3 *3*							
$^{222}_{90}Th_{132}$	183.3 *10*	3.01 *32*	346 *29*	0.153 *8*	8.64 *46*	5.49 *29*	0.95 *11*	5.8 *6*
$^{224}_{90}Th_{134}$	98.1 *3*							
$^{226}_{90}Th_{136}$	72.20 *4*	6.85 *42*	570 *29*	0.228 *7*	12.90 *40*	8.29 *25*	0.83 *5*	5.22 *32*
$^{228}_{90}Th_{138}$	57.759 *4*	7.06 *24*	584 *14*	0.2301 *39*	13.02 *22*	8.42 *14*	0.672 *23*	4.31 *15*
$^{230}_{90}Th_{140}$	53.20 *2*	8.04 *10*	521 *12*	0.2441 *15*	13.82 *9*	8.99 *6*	0.695 *9*	4.54 *6*
$^{232}_{90}Th_{142}$	49.369 *9*	9.28 *10*	457 *10*	0.2608 *14*	14.76 *8*	9.66 *5*	0.734 *8*	4.87 *5*
$^{234}_{90}Th_{144}$	49.55 *6*	8.0 *7*	534 *43*	0.241 *11*	13.6 *6*	8.96 *39*	0.63 *6*	4.23 *38*
$^{226}_{92}U_{134}$	80.5 *10*							
$^{228}_{92}U_{136}$	59 *10*							
$^{230}_{92}U_{138}$	51.72 *4*	9.7 *12*	375 *43*	0.262 *16*	15.1 *9*	9.9 *6*	0.82 *10*	5.1 *6*
$^{232}_{92}U_{140}$	47.572 *7*	10.0 *10*	366 *29*	0.264 *13*	15.3 *8*	10.0 *5*	0.76 *8*	4.84 *49*
$^{234}_{92}U_{142}$	43.498 *1*	10.66 *20*	345 *10*	0.2718 *26*	15.73 *15*	10.35 *10*	0.732 *14*	4.73 *9*
$^{236}_{92}U_{144}$	45.242 *3*	11.61 *15*	315 *7*	0.2821 *18*	16.32 *11*	10.80 *7*	0.817 *11*	5.38 *7*
$^{238}_{92}U_{146}$	44.91 *3*	12.09 *20*	303 *8*	0.2863 *24*	16.56 *14*	11.02 *9*	0.833 *14*	5.58 *10*
$^{240}_{92}U_{148}$	45 *1*							
$^{236}_{94}Pu_{142}$	44.63 *10*							
$^{238}_{94}Pu_{144}$	44.08 *3*	12.61 *17*	247 *6*	0.2861 *19*	16.92 *11*	11.26 *8*	0.853 *12*	5.47 *8*
$^{240}_{94}Pu_{146}$	42.824 *8*	13.02 *30*	241 *8*	0.2891 *33*	17.09 *20*	11.44 *13*	0.844 *20*	5.50 *13*
$^{242}_{94}Pu_{148}$	44.54 *2*	13.40 *16*	232 *5*	0.2917 *17*	17.25 *10*	11.61 *7*	0.891 *11*	5.90 *7*
$^{244}_{94}Pu_{150}$	46 *2*	13.68 *16*	226 *6*	0.2931 *17*	17.33 *10*	11.73 *7*	0.93 *5*	6.24 *34*
$^{246}_{94}Pu_{152}$	44.2 *4*							
$^{238}_{96}Cm_{142}$	35 *8*							
$^{240}_{96}Cm_{144}$	38 *5*	14.3 *6*	190 *13*	0.297 *6*	17.91 *38*	11.99 *25*	0.83 *14*	5.2 *9*
$^{242}_{96}Cm_{146}$	42.13 *1*							
$^{244}_{96}Cm_{148}$	42.965 *10*	14.67 *17*	181.1 *39*	0.2972 *17*	17.95 *10*	12.14 *7*	0.928 *11*	5.99 *7*
$^{246}_{96}Cm_{150}$	42.852 *5*	14.94 *19*	180.8 *41*	0.2983 *19*	18.01 *11*	12.26 *8*	0.930 *12*	6.10 *8*
$^{248}_{96}Cm_{152}$	43.38 *3*	14.99 *19*	177.0 *40*	0.2972 *19*	17.94 *11*	12.28 *8*	0.932 *12*	6.22 *8*
$^{250}_{96}Cm_{154}$	43 *5*							
$^{244}_{98}Cf_{146}$	40 *2*							
$^{246}_{98}Cf_{148}$								
$^{248}_{98}Cf_{150}$	41.53 *6*							
$^{250}_{98}Cf_{152}$	42.722 *5*	16.0 *16*	145 *16*	0.299 *15*	18.4 *9*	12.7 *6*	0.97 *10*	6.3 *6*

TABLE I. Adopted Values of $B(E2)\uparrow$ and Related Quantities

See page 14 for Explanation of Tables

Nuclide	E(level) (keV)	$B(E2)\uparrow$ (e^2b^2)	τ(ps)	β	$\beta/\beta_{(sp)}$	Q_0(b)	EWSR (I)(%)	EWSR (II)(%)
$^{252}_{98}Cf_{154}$	45.72 *5*	16.7 *11*	136 *10*	0.304 *10*	18.7 *6*	12.95 *43*	1.07 *7*	7.04 *47*
$^{248}_{100}Fm_{148}$	44 *8*							
$^{250}_{100}Fm_{150}$	44 *5*							
$^{252}_{100}Fm_{152}$	46.6 *12*							
$^{254}_{100}Fm_{154}$	44.988 *10*							
$^{256}_{100}Fm_{156}$	48.1 *10*							

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{4}_{2}\mathrm{He}_{2}$ 27420 *90* keV			
$^{6}_{2}\mathrm{He}_{4}$ 1797 *25* keV			
$^{8}_{2}\mathrm{He}_{6}$ 3590 *60* keV			
$^{10}_{2}\mathrm{He}_{8}$ 3240 *200* keV			
$^{6}_{4}\mathrm{Be}_{2}$ 1670 *50* keV			
$^{8}_{4}\mathrm{Be}_{4}$ 3040 *30* keV			
$^{10}_{4}\mathrm{Be}_{6}$ 3368.03 *3* keV			
0.0053 *6*	0.181 *21*	ADOPTED VALUE	
0.0061 *11*	0.160 *30*	Doppler Shift	1966Wa10
0.0050 *5*	0.189 *20*	Doppler Shift	1968Fi09
$^{12}_{4}\mathrm{Be}_{8}$ 2102 *12* keV			
$^{14}_{4}\mathrm{Be}_{10}$ 1590 *120* keV			
$^{10}_{6}\mathrm{C}_{4}$ 3353.6 *7* keV			
0.0064 *10*	0.155 *25*	Doppler Shift	1968Fi09
$^{12}_{6}\mathrm{C}_{6}$ 4438.91 *31* keV			
0.00397 *33*	0.060 *5*	ADOPTED VALUE	
0.0038 *7*	0.065 *12*	Reson Fluor	1958Ra14
0.0048 *6*	0.050 *6*	Doppler Shift	1961De38
0.0044 *15*	0.060 *20*	Doppler Shift	1966Wa10
0.0052 *11*	0.048 *10*	Doppler Shift	1967Ca02
0.0044 *6*	0.055 *7*	Doppler Shift	1968Ri16
0.0037 *5*	0.065 *9*	Doppler Shift	1970Co09
0.0035 *20*	0.10 *6*	Reson Fluor	1971Fa14
0.0055 *12*	0.045 *10*	Doppler Shift	1976Be64
0.0043 *13*	0.061 *18*	Doppler Shift	1980Li14
0.00411 *36*	0.058 *5*	Doppler Shift	1988Ku33
0.0041 *8*	0.060 *13*	Doppler Shift	1988Lu04
0.0047 *10*	0.053 *11*	Electron Scatt	1956He83
0.00406 *41*	0.059 *6*	Electron Scatt	1964Cr11
0.00386 *37*	0.062 *6*	Electron Scatt	1967Cr01
0.00397 *33*	0.060 *5*	Electron Scatt	1970St10
$^{14}_{6}\mathrm{C}_{8}$ 7012 *4* keV			
0.00187 *25*	0.0131 *18*	Electron Scatt	1972CrZN
$^{16}_{6}\mathrm{C}_{10}$ 1766 *10* keV			
$^{18}_{6}\mathrm{C}_{12}$ 1620 *20* keV			
$^{14}_{8}\mathrm{O}_{6}$ 6590 *10* keV			
$^{16}_{8}\mathrm{O}_{8}$ 6917.1 *6* keV			
0.00406 *38*	0.0064 *6*	ADOPTED VALUE	
0.0023 *6*	0.0120 *30*	Reson Fluor	1957Sw17
0.0028 *8*	0.0100 *30*	Reson Fluor	1960Re05
0.00317 *27*	0.0082 *7*	Reson Fluor	1968Ev03
0.0043 *12*	0.0065 *18*	Doppler Shift	1970Co09
0.00432 *20*	0.00598 *27*	Reson Fluor	1970Sw03
0.00372 *40*	0.0070 *7*	Reson Fluor	1977La15
0.00368 *42*	0.0071 *8*	Electron Scatt	1968St04
0.00512 *36*	0.00506 *35*	Electron Scatt	1973Be49
0.00392 *16*	0.00658 *26*	Electron Scatt	1975Mi08
$^{18}_{8}\mathrm{O}_{10}$ 1982.07 *9* keV			
0.00451 *20*	2.96 *13*	ADOPTED VALUE	
0.0037 *7*	3.7 *7*	Doppler Shift	1963Li07
0.0022 *10*	7.6 *35*	Doppler Shift	1964Es02
0.0049 *11*	2.9 *6*	Coul Ex (x,x′γ)	1967DeZW
0.0046 *14*	3.2 *10*	Coul Ex (x,x′γ)	1968An20
0.00412 *25*	3.25 *20*	Doppler Shift	1968LaZZ
0.00390 *40*	3.46 *35*	Coul Ex (x,x′)	1971HaXH
0.0048 *13*	3.0 *8*	Doppler Shift	1973Ol02
0.00374 *19*	3.58 *18*	Recoil Dist	1974Be25
0.00400 *24*	3.35 *20*	Recoil Dist	1974Mc17
0.00476 *19*	2.81 *11*	Doppler Shift	1975He25
0.00480 *20*	2.78 *12*	Coul Ex (x,x′)	1975Kl09
0.00447 *18*	2.99 *12*	Recoil Dist	1976As04
0.00461 *19*	2.90 *12*	Recoil Dist	1976As07
0.00453 *25*	2.95 *16*	Coul Ex (x,x′)	1977Fl10
0.00432 *28*	3.10 *20*	Doppler Shift	1977LiZS
0.00402 *14*	3.32 *12*	Coul Ex (x,x′γ)	1977Vo07
0.00390 *18*	3.43 *16*	Coul Ex (x,x′)	1979Fe06
0.00477 *12*	2.80 *7*	Doppler Shift	1982Ba06
0.0051 *23*	3.3 *15*	Electron Scatt	1961La09
0.00448 *13*	2.98 *9*	Electron Scatt	1982No04
$^{20}_{8}\mathrm{O}_{12}$ 1673.68 *15* keV			
0.00281 *20*	11.1 *8*	ADOPTED VALUE	
0.00220 *13*	14.2 *8*	Recoil Dist	1975Be15
0.00319 *23*	9.8 *7*	Doppler Shift	1977He12
0.00291 *11*	10.70 *40*	Recoil Dist	1980Ru01
$^{22}_{8}\mathrm{O}_{14}$ 3190 *15* keV			
0.0021 *8*	0.69 *28*	Coul Ex (x,x′γ)	2000Th11
$^{16}_{10}\mathrm{Ne}_{6}$ 1690 *70* keV			
$^{18}_{10}\mathrm{Ne}_{8}$ 1887.3 *2* keV			
0.0269 *26*	0.64 *6*	ADOPTED VALUE	
0.034 *8*	0.53 *13*	Doppler Shift	1969Ro08
0.028 *6*	0.63 *13*	Doppler Shift	1974Mc17
0.0256 *23*	0.67 *6*	Doppler Shift	1976Mc02

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.0125 *34*	1.47 *40*	Coul Ex (x,x′γ)	2000Ri15
$^{20}_{10}$Ne$_{10}$ 1633.674 *15* keV			
0.0340 *30*	1.04 *9*	ADOPTED VALUE	
0.057 *25*	0.76 *33*	Doppler Shift	1956De22
0.041 *10*	0.91 *22*	Coul Ex (x,x′γ)	1959Al95
0.047 *9*	0.77 *15*	Coul Ex (x,x′γ)	1960An07
0.061 *19*	0.64 *20*	Doppler Shift	1961Cl06
0.0288 *28*	1.23 *12*	Doppler Shift	1965Ev03
0.030 *9*	1.25 *35*	Doppler Shift	1969An08
0.0044 *10*	0.84 *20*	Doppler Shift	1969Gr03
0.0540 *20*	0.650 *24*	Coul Ex (x,x′γ)	1969ScZV
0.029 *5*	1.26 *24*	Doppler Shift	1969Th01
0.048 *7*	0.75 *11*	Coul Ex (x,x′γ)	1970Na07
0.031 *5*	1.15 *20*	Doppler Shift	1971Ha26
0.0370 *30*	0.95 *8*	Coul Ex (x,x′γ)	1972Ol02
0.0319 *30*	1.11 *10*	Coul Ex (x,x′γ)	1973ScWZ
0.047 *12*	0.80 *20*	Recoil Dist	1975Ho15
0.0322 *26*	1.10 *9*	Coul Ex (x,x′γ)	1977Sc36
0.032 *7*	1.14 *24*	Doppler Shift	1982Sp02
0.0280 *40*	1.28 *18*	Electron Scatt	1973Si31
$^{22}_{10}$Ne$_{12}$ 1274.542 *7* keV			
0.0230 *10*	5.29 *23*	ADOPTED VALUE	
0.025 *6*	5.2 *12*	Coul Ex (x,x′γ)	1959Al95
0.039 *8*	3.2 *7*	Coul Ex (x,x′γ)	1960An07
0.023 *12*	7.1 *36*	Doppler Shift	1964Es02
0.018 *7*	8.0 *30*	Doppler Shift	1966Li07
0.0267 *29*	4.6 *5*	Recoil Dist	1969Jo10
0.036 *24*	6.0 *40*	Recoil Dist	1969Ni09
0.0200 *16*	6.1 *5*	Recoil Dist	1969ScZV
0.033 *6*	3.8 *7*	Coul Ex (x,x′γ)	1970Na07
0.0250 *20*	4.88 *39*	Coul Ex (x,x′γ)	1972Ol02
0.0213 *40*	5.9 *11*	Recoil Dist	1972Sn01
0.0208 *21*	5.9 *6*	Recoil Dist	1972Sz05
0.0226 *17*	5.40 *40*	Recoil Dist	1973An01
0.0221 *12*	5.51 *30*	Coul Ex (x,x′γ)	1973ScWZ
0.0234 *14*	5.20 *30*	Recoil Dist	1977Ho01
0.0250 *36*	5.0 *7*	Recoil Dist	1977Og03
0.0216 *8*	5.62 *20*	Recoil Dist	1977Ra01
0.0223 *6*	5.45 *15*	Coul Ex (x,x′γ)	1977Sc36
0.0237 *14*	5.15 *31*	Doppler Shift	1979Fo02
0.0238 *9*	5.10 *20*	Recoil Dist	1983Ko01
0.0235 *6*	5.16 *13*	Recoil Dist	1984Bh03
0.0220 *20*	5.6 *5*	Electron Scatt	1973Si31
0.0271 *36*	4.6 *6*	Electron Scatt	1979Ma13
$^{24}_{10}$Ne$_{14}$ 1981.6 *4* keV			
0.017 *6*	0.92 *32*	ADOPTED VALUE	
0.017 *6*	0.90 *30*	Doppler Shift	1969Bh01
0.017 *6*	0.92 *32*	Doppler Shift	1974Wa04
$^{26}_{10}$Ne$_{16}$ 2018.2 *3* keV			
0.0228 *41*	0.55 *10*	Coul Ex (x,x′γ)	1999Pr09
$^{28}_{10}$Ne$_{18}$ 1310 *20* keV			
0.027 *14*	5.6 *32*	Coul Ex (x,x′γ)	1999Pr09
$^{22}_{12}$Mg$_{10}$ 1246.3 *6* keV			
0.037 *13*	4.2 *15*	ADOPTED VALUE	
0.11 *6*	2.0 *12*	Doppler Shift	1972Ro20
0.037 *13*	4.2 *15*	Doppler Shift	1975Gr04
$^{24}_{12}$Mg$_{12}$ 1368.675 *6* keV			
0.0432 *11*	1.97 *5*	ADOPTED VALUE	
0.053 *12*	1.70 *40*	Reson Fluor	1958De33
0.054 *14*	1.69 *44*	Coul Ex (x,x′γ)	1959Al95
0.11 *6*	1.1 *7*	Reson Fluor	1959Ar56
0.089 *32*	1.10 *40*	Reson Fluor	1959Of14
0.065 *13*	1.36 *27*	Coul Ex (x,x′γ)	1960An07
0.034 *7*	2.6 *5*	Coul Ex (x,x′γ)	1960Go08
0.062 *23*	1.6 *6*	Reson Fluor	1960Me06
0.045 *16*	2.2 *8*	Reson Fluor	1962Bo17
0.072 *22*	1.30 *40*	Reson Fluor	1964Bo22
0.080 *15*	1.10 *20*	Reson Fluor	1965Ka15
0.044 *6*	1.95 *26*	Reson Fluor	1966Sk01
0.054 *7*	1.60 *20*	Doppler Shift	1968Cu05
0.060 *9*	1.46 *22*	Doppler Shift	1968Ro05
0.051 *20*	2.0 *8*	Doppler Shift	1969An08
0.0519 *47*	1.65 *15*	Doppler Shift	1969Pe11
0.0405 *31*	2.11 *16*	Recoil Dist	1970Al10
0.042 *7*	2.07 *34*	Doppler Shift	1970Cu02
0.0425 *29*	2.01 *14*	Coul Ex (x,x′γ)	1970Ha04
0.078 *9*	1.11 *13*	Reson Fluor	1970He01
0.0445 *35*	1.92 *15*	Reson Fluor	1971Sw07
0.0420 *20*	2.03 *10*	Coul Ex (x,x′)	1971Vi01
0.053 *18*	1.8 *6*	Doppler Shift	1972Ba93
0.0440 *30*	1.94 *13*	Coul Ex (x,x′)	1972HaYA
0.068 *22*	1.40 *45*	Doppler Shift	1972Me09
0.0378 *15*	2.25 *9*	Recoil Dist	1973Br33
0.0444 *23*	1.92 *10*	Doppler Shift	1973ScWZ
0.0413 *15*	2.06 *7*	Coul Ex (x,x′γ)	1973ScWZ
0.0470 *36*	1.82 *14*	Doppler Shift	1974Fo13
0.0440 *30*	1.94 *13*	Coul Ex (x,x′γ)	1975Bi03
0.0408 *25*	2.09 *13*	Recoil Dist	1975Ho15
0.048 *5*	1.80 *20*	Reson Fluor	1977Ca14
0.0420 *14*	2.02 *7*	Coul Ex (x,x′γ)	1977Sc36
0.0444 *23*	1.92 *10*	Doppler Shift	1977Sc36
0.0445 *24*	1.92 *10*	Coul Ex (x,x′)	1979Fe05
0.049 *6*	1.76 *21*	Reson Fluor	1981Ca10

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.0434 *35*	1.97 *16*	Doppler Shift	1989Ke04
0.0451 *40*	1.90 *17*	Electron Scatt	1956He83
0.047 *6*	1.84 *24*	Electron Scatt	1969Sa14
0.036 *7*	2.5 *5*	Electron Scatt	1969Sa14
0.0455 *12*	1.869 *49*	Electron Scatt	1969Ti01
0.0412 *43*	2.08 *22*	Electron Scatt	1970Kh05
0.0327 *35*	2.63 *28*	Electron Scatt	1972Na06
0.0420 *25*	2.03 *12*	Electron Scatt	1974Jo10
$^{26}_{12}$Mg$_{14}$ 1808.73 *3* keV			
0.0305 *13*	0.692 *30*	ADOPTED VALUE	
0.035 *9*	0.65 *17*	Coul Ex (x,x′γ)	1961An07
0.037 *16*	0.70 *30*	Reson Fluor	1961Ra05
0.068 *28*	0.37 *15*	Reson Fluor	1964Bo22
0.041 *8*	0.53 *10*	Doppler Shift	1968Ha18
0.038 *6*	0.57 *9*	Doppler Shift	1968Ro05
0.070 *18*	0.32 *8*	Doppler Shift	1970De01
0.037 *16*	0.70 *30*	Recoil Dist	1971Mc20
0.036 *6*	0.61 *10*	Doppler Shift	1972Du05
0.0305 *22*	0.69 *5*	Doppler Shift	1973ScWZ
0.0291 *13*	0.726 *32*	Coul Ex (x,x′γ)	1973ScWZ
0.0296 *33*	0.72 *8*	Doppler Shift	1975Eb01
0.0307 *48*	0.70 *11*	Doppler Shift	1975Wa10
0.0305 *22*	0.69 *5*	Doppler Shift	1977Sc36
0.0296 *13*	0.714 *31*	Coul Ex (x,x′γ)	1977Sc36
0.0324 *19*	0.653 *39*	Doppler Shift	1981Dy01
0.0325 *19*	0.651 *38*	Coul Ex (x,x′)	1982Sp05
0.0349 *30*	0.61 *5*	Electron Scatt	1970Kh05
0.0299 *29*	0.71 *7*	Electron Scatt	1973Le17
0.0275 *20*	0.77 *6*	Electron Scatt	1974Le17
$^{28}_{12}$Mg$_{16}$ 1473.4 *6* keV			
0.035 *5*	1.73 *26*	ADOPTED VALUE	
0.0373 *47*	1.60 *20*	Doppler Shift	1973Fi03
0.031 *6*	2.00 *40*	Doppler Shift	1974Ra15
$^{30}_{12}$Mg$_{18}$ 1482.2 *4* keV			
0.0295 *26*	1.95 *17*	Coul Ex (x,x′γ)	1999Pr09
$^{32}_{12}$Mg$_{20}$ 885.5 *7* keV			
0.039 *7*	19.9 *36*	ADOPTED VALUE	
0.045 *8*	17.0 *30*	Coul Ex (x,x′γ)	1998Mo18
0.033 *7*	24 *5*	Coul Ex (x,x′γ)	1999Pr09
$^{34}_{12}$Mg$_{22}$ 670 *10* keV			
$^{26}_{14}$Si$_{12}$ 1795.9 *2* keV			
0.0356 *34*	0.62 *6*	ADOPTED VALUE	
0.017 *7*	1.5 *6*	Doppler Shift	1969Be31
0.0356 *34*	0.62 *6*	Doppler Shift	1982Al15
$^{28}_{14}$Si$_{14}$ 1779.030 *11* keV			
0.0326 *12*	0.703 *26*	ADOPTED VALUE	
0.035 *10*	0.73 *22*	Reson Fluor	1959Of14
0.027 *9*	0.95 *32*	Coul Ex (x,x′γ)	1960Ad01
0.044 *9*	0.54 *11*	Coul Ex (x,x′γ)	1960An07
0.025 *5*	0.95 *19*	Coul Ex (x,x′γ)	1960Go08
0.029 *10*	0.88 *30*	Reson Fluor	1962Bo17
0.0320 *27*	0.72 *6*	Reson Fluor	1963Sk01
0.044 *12*	0.56 *15*	Reson Fluor	1964Bo22
0.0329 *46*	0.71 *10*	Reson Fluor	1966Sk01
0.034 *7*	0.70 *14*	Coul Ex (x,x′)	1967Af03
0.040 *8*	0.60 *12*	Reson Fluor	1967Be39
0.039 *9*	0.62 *15*	Reson Fluor	1968Cr07
0.041 *7*	0.58 *10*	Doppler Shift	1968Gi05
0.0325 *27*	0.71 *6*	Doppler Shift	1968Ma05
0.0327 *37*	0.71 *8*	Doppler Shift	1968Ro05
0.0271 *35*	0.86 *11*	Doppler Shift	1969An08
0.046 *22*	0.65 *31*	Doppler Shift	1969Bi09
0.028 *7*	0.87 *22*	Doppler Shift	1969Gr03
0.0317 *17*	0.725 *39*	Coul Ex (x,x′γ)	1969Ha31
0.035 *16*	0.82 *37*	Doppler Shift	1969Me14
0.0315 *22*	0.73 *5*	Doppler Shift	1969Pe08
0.041 *12*	0.61 *18*	Doppler Shift	1970Al05
0.040 *8*	0.59 *12*	Doppler Shift	1970Hu14
0.0330 *40*	0.70 *9*	Coul Ex (x,x′γ)	1970Na05
0.0330 *28*	0.70 *6*	Reson Fluor	1972ArZD
0.0326 *12*	0.703 *26*	Coul Ex (x,x′γ)	1973ScWZ
0.0315 *22*	0.73 *5*	Doppler Shift	1973ScWZ
0.0331 *38*	0.70 *8*	Doppler Shift	1975Eb01
0.029 *6*	0.83 *17*	Doppler Shift	1977MiZM
0.0331 *12*	0.693 *25*	Coul Ex (x,x′γ)	1977Sc36
0.0314 *21*	0.73 *5*	Doppler Shift	1977Sc36
0.0344 *18*	0.667 *35*	Doppler Shift	1979Fo02
0.0330 *19*	0.697 *39*	Doppler Shift	1979Po01
0.0350 *18*	0.656 *34*	Coul Ex (x,x′)	1980Ba40
0.0333 *13*	0.688 *26*	Doppler Shift	1980Sc25
0.0326 *20*	0.705 *43*	Coul Ex (x,x′)	1980Sp09
0.039 *7*	0.60 *10*	Electron Scatt	1956He83
0.0428 *40*	0.54 *5*	Electron Scatt	1966Li08
0.0280 *38*	0.83 *11*	Electron Scatt	1972Na06
0.0337 *30*	0.69 *6*	Electron Scatt	1977Br16
$^{30}_{14}$Si$_{16}$ 2235.33 *3* keV			
0.0215 *10*	0.340 *16*	ADOPTED VALUE	
0.0161 *18*	0.46 *5*	Doppler Shift	1967Br01
0.030 *7*	0.26 *6*	Doppler Shift	1967Li05
0.0248 *33*	0.300 *40*	Doppler Shift	1969Bi11
0.0221 *14*	0.332 *21*	Doppler Shift	1970Cu02
0.0227 *34*	0.33 *5*	Doppler Shift	1971Sh11
0.0213 *39*	0.35 *7*	Doppler Shift	1972Ga05

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.037 *19*	0.27 *14*	Doppler Shift	1973ScWZ
0.028 *7*	0.27 *7*	Coul Ex (x,x′γ)	1973ScWZ
0.0206 *23*	0.360 *40*	Doppler Shift	1975Eb01
0.0202 *11*	0.363 *20*	Doppler Shift	1975He25
0.029 *7*	0.27 *7*	Coul Ex (x,x′γ)	1977Sc36
0.037 *19*	0.27 *14*	Doppler Shift	1977Sc36
0.0257 *34*	0.290 *38*	Coul Ex (x,x′)	1979Fe08
0.0240 *31*	0.310 *40*	Doppler Shift	1980Bi14
0.0205 *10*	0.358 *18*	Doppler Shift	1980Sc25
0.0216 *30*	0.345 *48*	Electron Scatt	1977Br16
$^{32}_{14}$Si$_{18}$ 1941.5 *2* keV			
0.0113 *33*	1.43 *42*	ADOPTED VALUE	
0.018 *6*	0.92 *32*	Doppler Shift	1972Pr18
0.0315 *46*	0.48 *7*	Doppler Shift	1974Gu11
0.0113 *33*	1.43 *42*	Coul Ex (x,x′)	1998Ib01
$^{34}_{14}$Si$_{20}$ 3327.5 *5* keV			
0.0085 *33*	0.15 *7*	Coul Ex (x,x′)	1998Ib01
$^{36}_{14}$Si$_{22}$ 1399 *25* keV			
0.019 *6*	4.5 *17*	Coul Ex (x,x′)	1998Ib01
$^{38}_{14}$Si$_{24}$ 1084 *20* keV			
0.019 *7*	17 *8*	Coul Ex (x,x′)	1998Ib01
$^{30}_{16}$S$_{14}$ 2210.6 *5* keV			
0.0324 *41*	0.242 *30*	ADOPTED VALUE	
0.046 *9*	0.175 *35*	Doppler Shift	1970Bi08
0.027 *7*	0.31 *8*	Doppler Shift	1972Ca22
0.061 *21*	0.14 *5*	Doppler Shift	1973Ku15
0.0307 *28*	0.254 *23*	Doppler Shift	1982Al22
$^{32}_{16}$S$_{16}$ 2230.3 *2* keV			
0.0300 *13*	0.247 *11*	ADOPTED VALUE	
0.032 *11*	0.26 *9*	Reson Fluor	1962Bo17
0.031 *10*	0.27 *9*	Reson Fluor	1964Bo22
0.024 *6*	0.33 *8*	Reson Fluor	1964Ma01
0.042 *9*	0.185 *40*	Coul Ex (x,x′)	1967Af03
0.027 *7*	0.30 *8*	Doppler Shift	1969Gr03
0.031 *10*	0.26 *8*	Doppler Shift	1969Th03
0.033 *5*	0.229 *35*	Coul Ex (x,x′γ)	1970Na05
0.035 *9*	0.23 *6*	Doppler Shift	1971Ga01
0.0284 *20*	0.262 *19*	Coul Ex (x,x′γ)	1971Ha47
0.0218 *37*	0.35 *6*	Doppler Shift	1971In02
0.044 *7*	0.175 *30*	Doppler Shift	1971Re15
0.049 *21*	0.18 *8*	Doppler Shift	1972Co13
0.0308 *35*	0.240 *27*	Doppler Shift	1973ScWZ
0.0295 *13*	0.251 *11*	Coul Ex (x,x′γ)	1973ScWZ
0.044 *16*	0.20 *7*	Doppler Shift	1974Ch09
0.0305 *16*	0.243 *13*	Coul Ex (x,x′γ)	1974Ol02
0.0300 *13*	0.247 *11*	Coul Ex (x,x′γ)	1977Sc36
0.0312 *35*	0.240 *27*	Doppler Shift	1977Sc36
0.0315 *22*	0.236 *16*	Doppler Shift	1980Ba40
0.0466 *44*	0.160 *15*	Electron Scatt	1956He83
0.0202 *22*	0.370 *41*	Electron Scatt	1964Lo08
0.033 *7*	0.23 *5*	Electron Scatt	1970St10
$^{34}_{16}$S$_{18}$ 2127.564 *13* keV			
0.0212 *12*	0.443 *25*	ADOPTED VALUE	
0.0276 *47*	0.35 *6*	Doppler Shift	1969Gr03
0.0213 *44*	0.46 *10*	Doppler Shift	1970Br18
0.0208 *40*	0.47 *9*	Doppler Shift	1970Cu02
0.0215 *24*	0.44 *5*	Doppler Shift	1970Gr11
0.0236 *19*	0.400 *32*	Doppler Shift	1970Ra17
0.0206 *22*	0.46 *5*	Doppler Shift	1973ScWZ
0.0200 *13*	0.470 *31*	Coul Ex (x,x′γ)	1973ScWZ
0.0236 *24*	0.400 *40*	Doppler Shift	1974Gr06
0.0250 *40*	0.38 *6*	Coul Ex (x,x′γ)	1974Ol02
0.0192 *12*	0.490 *30*	Doppler Shift	1975He25
0.0203 *13*	0.463 *30*	Coul Ex (x,x′γ)	1977Sc36
0.0206 *22*	0.46 *5*	Doppler Shift	1977Sc36
0.0213 *13*	0.442 *26*	Doppler Shift	1980Ba40
0.0193 *7*	0.486 *18*	Electron Scatt	1985Wo06
$^{36}_{16}$S$_{20}$ 3290.9 *3* keV			
0.0104 *28*	0.110 *30*	Doppler Shift	1972Sa09
$^{38}_{16}$S$_{22}$ 1292.0 *2* keV			
0.0235 *30*	4.9 *6*	Coul Ex (x,x′γ)	1996Sc31
$^{40}_{16}$S$_{24}$ 900 *10* keV			
0.0334 *36*	21.1 *34*	Coul Ex (x,x′γ)	1996Sc31
$^{42}_{16}$S$_{26}$ 890 *10* keV			
0.040 *6*	18.9 *39*	Coul Ex (x,x′γ)	1996Sc31
$^{44}_{16}$S$_{28}$ 1315 *15* keV			
0.031 *9*	3.7 *13*	Coul Ex (x,x′γ)	1997Gl02
$^{34}_{18}$Ar$_{16}$ 2090.9 *3* keV			
0.0240 *40*	0.44 *7*	ADOPTED VALUE	
0.077 *26*	0.15 *5*	Doppler Shift	1972Ca22
0.033 *8*	0.33 *8*	Doppler Shift	1974Be18
0.056 *17*	0.20 *6*	Doppler Shift	1974Gr19
0.0226 *30*	0.46 *6*	Doppler Shift	1985Al18
$^{36}_{18}$Ar$_{18}$ 1970.39 *5* keV			
0.0300 *30*	0.463 *46*	ADOPTED VALUE	

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.032 *8*	0.46 *11*	Doppler Shift	1969Gr03
0.037 *9*	0.40 *10*	Doppler Shift	1970Th04
0.032 *5*	0.44 *7*	Coul Ex (x,x′γ)	1971Na06
0.044 *15*	0.35 *12*	Doppler Shift	1972Ho40
0.045 *15*	0.34 *11*	Doppler Shift	1974Jo02
0.0281 *17*	0.491 *29*	Electron Scatt	1977Fi09
0.0286 *23*	0.484 *39*	Coul Ex (x,x′γ)	1999Pr09
0.0310 *31*	0.448 *45*	Coul Ex (x,x′γ)	1999Co23
$^{38}_{18}$Ar$_{20}$ 2167.472 *9* keV			
0.0130 *10*	0.66 *5*	ADOPTED VALUE	
0.0134 *19*	0.65 *9*	Doppler Shift	1968Li04
0.0160 *19*	0.54 *7*	Doppler Shift	1969En04
0.0202 *49*	0.45 *11*	Doppler Shift	1969Gr03
0.019 *5*	0.49 *13*	Doppler Shift	1970Cu02
0.0100 *29*	0.93 *27*	Doppler Shift	1971Ja10
0.0125 *39*	0.76 *24*	Doppler Shift	1971Ja15
0.0126 *6*	0.680 *30*	Doppler Shift	1976Fo12
$^{40}_{18}$Ar$_{22}$ 1460.859 *5* keV			
0.0330 *40*	1.89 *23*	ADOPTED VALUE	
0.049 *10*	1.31 *27*	Coul Ex (x,x′γ)	1965Gu10
0.032 *5*	1.97 *31*	Coul Ex (x,x′γ)	1970Na05
0.056 *17*	1.20 *37*	Doppler Shift	1971Ja15
0.0316 *24*	1.95 *15*	Doppler Shift	1976So03
0.045 *17*	1.6 *6*	Doppler Shift	1979Be41
0.032 *6*	2.00 *40*	Doppler Shift	1983Bi08
0.037 *7*	1.71 *31*	Coul Ex (x,x′)	1998Ib01
0.0383 *13*	1.60 *5*	Electron Scatt	1977Fi09
$^{42}_{18}$Ar$_{24}$ 1208.2 *3* keV			
0.043 *10*	3.9 *9*	Doppler Shift	1974Fi01
$^{44}_{18}$Ar$_{26}$ 1144 *17* keV			
0.0345 *41*	6.2 *12*	Coul Ex (x,x′γ)	1996Sc31
$^{46}_{18}$Ar$_{28}$ 1550 *10* keV			
0.0196 *39*	2.4 *6*	Coul Ex (x,x′γ)	1996Sc31
$^{38}_{20}$Ca$_{18}$ 2206 *5* keV			
0.0096 *21*	0.86 *20*	Coul Ex (x,x′γ)	1999Co23
$^{40}_{20}$Ca$_{20}$ 3904.38 *3* keV			
0.0099 *17*	0.047 *8*	ADOPTED VALUE	
0.026 *8*	0.019 *6*	Doppler Shift	1968Do12
0.0191 *46*	0.025 *6*	Doppler Shift	1968Li12
0.0077 *23*	0.064 *19*	Doppler Shift	1968Ma05
0.013 *9*	0.07 *5*	Doppler Shift	1969Po04
0.0101 *11*	0.045 *5*	Reson Fluor	1970RaZC
0.0089 *23*	0.054 *14*	Doppler Shift	1970StZP
0.0080 *14*	0.058 *10*	Doppler Shift	1971Ma03

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.0098 *20*	0.048 *10*	Doppler Shift	1971Ma03
0.013 *5*	0.040 *16*	Doppler Shift	1972Si01
0.0101 *39*	0.052 *20*	Doppler Shift	1984El12
0.0029 *9*	0.17 *5*	Electron Scatt	1963Bl04
0.0084 *11*	0.054 *7*	Electron Scatt	1969Ei03
0.00720 *30*	0.0626 *26*	Electron Scatt	1970It01
0.0112 *24*	0.042 *9*	Electron Scatt	1970St10
0.0090 *10*	0.050 *6*	Electron Scatt	1973Ha13
$^{42}_{20}$Ca$_{22}$ 1524.73 *3* keV			
0.0420 *30*	1.19 *9*	ADOPTED VALUE	
0.037 *8*	1.40 *30*	Reson Fluor	1966Me11
0.054 *16*	1.00 *30*	Doppler Shift	1969Ca24
0.079 *31*	0.75 *30*	Doppler Shift	1969Ha02
0.032 *6*	1.60 *30*	Doppler Shift	1969Ko03
0.062 *21*	0.90 *30*	Doppler Shift	1971Ha12
0.0663 *44*	0.75 *5*	Reson Fluor	1972KaXR
0.0412 *15*	1.204 *44*	Coul Ex (x,x′γ)	1973To07
0.0320 *20*	1.55 *10*	Electron Scatt	1971He08
0.0418 *15*	1.186 *43*	Electron Scatt	1989It02
$^{44}_{20}$Ca$_{24}$ 1157.047 *15* keV			
0.0470 *20*	4.19 *18*	ADOPTED VALUE	
0.035 *7*	5.9 *12*	Coul Ex (x,x′γ)	1961An07
0.0545 *35*	3.63 *23*	Coul Ex (x,x′γ)	1972Bi17
0.069 *20*	3.1 *9*	Doppler Shift	1972Gr04
0.0431 *36*	4.60 *38*	Doppler Shift	1973Fi15
0.040 *8*	5.1 *10*	Doppler Shift	1973Mc16
0.0473 *20*	4.17 *18*	Coul Ex (x,x′γ)	1973To07
0.0480 *30*	4.12 *26*	Electron Scatt	1971He08
0.0550 *20*	3.58 *13*	Electron Scatt	1989It02
$^{46}_{20}$Ca$_{26}$ 1346.0 *3* keV			
0.0182 *13*	5.10 *37*	Coul Ex (x,x′γ)	1972Bi17
$^{48}_{20}$Ca$_{28}$ 3831.72 *6* keV			
0.0095 *32*	0.059 *20*	ADOPTED VALUE	
0.0092 *38*	0.065 *27*	Doppler Shift	1968SeZZ
0.012 *5*	0.053 *24*	Doppler Shift	1970Be39
0.0086 *12*	0.059 *8*	Electron Scatt	1969Ei03
$^{50}_{20}$Ca$_{30}$ 1026 *1* keV			
$^{52}_{20}$Ca$_{32}$ 2563 *1* keV			
$^{42}_{22}$Ti$_{20}$ 1554.9 *8* keV			
0.087 *25*	0.56 *16*	ADOPTED VALUE	
0.030 *8*	1.60 *40*	Doppler Shift	1971Bo23
0.101 *44*	0.55 *24*	Doppler Shift	1971BrYK
0.104 *41*	0.51 *20*	Doppler Shift	1971FoZV
0.071 *29*	0.75 *30*	Doppler Shift	1973Co38

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.087 *25*	0.56 *16*	Doppler Shift	1973Ha10
$^{44}_{22}Ti_{22}$ 1082.99 *9* keV			
0.065 *16*	4.5 *11*	ADOPTED VALUE	
0.065 *26*	5.0 *20*	Recoil Dist	1971HuZR
0.065 *16*	4.5 *11*	Doppler Shift	1973Di04
$^{46}_{22}Ti_{24}$ 889.286 *3* keV			
0.095 *5*	7.74 *41*	ADOPTED VALUE	
0.056 *11*	13.6 *27*	Coul Ex (x,x′γ)	1956Te26
0.130 *40*	6.2 *19*	Coul Ex (x,x′γ)	1959Al95
0.083 *17*	9.2 *19*	Coul Ex (x,x′γ)	1960An07
0.102 *28*	7.8 *22*	Reson Fluor	1963Ak01
0.053 *7*	14.2 *20*	Reson Fluor	1963Ka29
0.081 *20*	9.7 *24*	Reson Fluor	1967TaZZ
0.107 *10*	6.9 *6*	Coul Ex (x,x′γ)	1970Ha24
0.111 *10*	6.7 *6*	Coul Ex (x,x′γ)	1970MiZQ
0.097 *7*	7.6 *5*	Coul Ex (x,x′)	1971De29
0.114 *12*	6.5 *7*	Recoil Dist	1973De09
0.0855 *40*	8.60 *40*	Coul Ex (x,x′γ)	1975To06
0.110 *8*	6.7 *5*	Delayed Coinc	1976Kl04
0.0740 *20*	9.92 *27*	Electron Scatt	1971He08
$^{48}_{22}Ti_{26}$ 983.519 *5* keV			
0.0720 *40*	6.18 *34*	ADOPTED VALUE	
0.031 *6*	14.9 *29*	Coul Ex (x,x′γ)	1956Te26
0.083 *28*	6.0 *20*	Reson Fluor	1958Kn36
0.140 *40*	3.4 *10*	Coul Ex (x,x′γ)	1959Al95
0.070 *14*	6.6 *13*	Coul Ex (x,x′γ)	1960An07
0.069 *21*	7.1 *22*	Reson Fluor	1963Ak02
0.15 *6*	3.6 *15*	Reson Fluor	1964Bo22
0.080 *16*	5.8 *12*	Coul Ex (x,x′γ)	1967Af03
0.069 *6*	6.5 *6*	Coul Ex (x,x′γ)	1970Ha24
0.081 *8*	5.5 *5*	Coul Ex (x,x′γ)	1970MiZQ
0.0720 *40*	6.18 *34*	Coul Ex (x,x′)	1971De29
0.086 *13*	5.3 *8*	Doppler Shift	1972WaYZ
0.078 *17*	6.0 *13*	Doppler Shift	1973Ba02
0.0536 *23*	8.29 *36*	Doppler Shift	1973Fi15
0.067 *5*	6.7 *5*	Reson Fluor	1977Ca14
0.12 *6*	4.8 *24*	Doppler Shift	1978DeYT
0.13 *6*	4.3 *20*	Doppler Shift	1978Li13
0.066 *5*	6.7 *6*	Reson Fluor	1981Ca10
0.0537 *15*	8.26 *23*	Electron Scatt	1971He08
$^{50}_{22}Ti_{28}$ 1553.778 *7* keV			
0.0290 *40*	1.58 *22*	ADOPTED VALUE	
0.040 *8*	1.17 *23*	Coul Ex (x,x′γ)	1962Va22
0.0260 *20*	1.74 *13*	Coul Ex (x,x′)	1965Si02
0.0173 *35*	2.7 *5*	Coul Ex (x,x′γ)	1967Af03
0.0330 *30*	1.38 *13*	Coul Ex (x,x′γ)	1970Ha24
0.042 *6*	1.10 *15*	Doppler Shift	1972WaYZ
0.0315 *30*	1.44 *14*	Coul Ex (x,x′γ)	1975To06
0.039 *11*	1.26 *36*	Reson Fluor	1976Ra03
0.0307 *10*	1.469 *48*	Electron Scatt	1971He08
$^{52}_{22}Ti_{30}$ 1049.73 *10* keV			
$^{48}_{24}Cr_{24}$ 752.16 *12* keV			
0.136 *21*	12.7 *19*	ADOPTED VALUE	
0.19 *5*	9.7 *26*	Recoil Dist	1973Ku10
0.103 *14*	16.7 *22*	Recoil Dist	1975Ha04
0.162 *17*	10.6 *11*	Recoil Dist	1979Ek03
$^{50}_{24}Cr_{26}$ 783.30 *9* keV			
0.108 *6*	12.8 *8*	ADOPTED VALUE	
0.150 *30*	9.6 *19*	Coul Ex (x,x′γ)	1960An07
0.115 *8*	12.1 *8*	Coul Ex (x,x′γ)	1961Mc18
0.092 *10*	15.2 *17*	Coul Ex (x,x′γ)	1971DaZM
0.115 *10*	12.1 *11*	Coul Ex (x,x′γ)	1972Ra14
0.144 *29*	10.0 *20*	Doppler Shift	1972Ra14
0.116 *12*	12.1 *12*	Recoil Dist	1973De09
0.113 *19*	12.6 *21*	Doppler Shift	1974Br04
0.102 *5*	13.5 *7*	Coul Ex (x,x′γ)	1975To06
0.093 *5*	14.9 *8*	Electron Scatt	1983Li02
$^{52}_{24}Cr_{28}$ 1434.090 *14* keV			
0.0660 *30*	1.021 *47*	ADOPTED VALUE	
0.090 *22*	0.80 *20*	Reson Fluor	1959Of14
0.060 *15*	1.20 *30*	Coul Ex (x,x′γ)	1960Ad01
0.062 *12*	1.13 *22*	Coul Ex (x,x′γ)	1960An07
0.073 *7*	0.93 *9*	Coul Ex (x,x′γ)	1961Mc18
0.067 *9*	1.02 *13*	Reson Fluor	1964Bo22
0.0480 *20*	1.40 *6*	Coul Ex (x,x′)	1965Si02
0.043 *9*	1.64 *34*	Coul Ex (x,x′γ)	1967Af03
0.072 *8*	0.95 *11*	Coul Ex (x,x′γ)	1971DaZM
0.069 *22*	1.09 *35*	Doppler Shift	1971Sp12
0.080 *12*	0.86 *13*	Doppler Shift	1972WaYZ
0.0660 *30*	1.021 *46*	Coul Ex (x,x′γ)	1975To06
0.0687 *13*	0.980 *19*	Reson Fluor	1981Ah02
0.0520 *40*	1.30 *10*	Electron Scatt	1964Be32
0.071 *9*	0.96 *12*	Electron Scatt	1971Pe11
0.076 *8*	0.90 *9*	Electron Scatt	1975DeXW
0.0634 *39*	1.06 *7*	Electron Scatt	1976Li19
0.080 *8*	0.85 *8*	Electron Scatt	1978Po04
0.0632 *40*	1.07 *7*	Electron Scatt	1983Li02
$^{54}_{24}Cr_{30}$ 834.855 *3* keV			
0.0870 *40*	11.6 *5*	ADOPTED VALUE	
0.079 *20*	13.6 *34*	Coul Ex (x,x′γ)	1959Al95
0.057 *11*	18.3 *35*	Coul Ex (x,x′γ)	1960An07
0.106 *7*	9.5 *6*	Coul Ex (x,x′γ)	1961Mc18
0.096 *9*	10.6 *10*	Coul Ex (x,x′γ)	1970MiZQ
0.0850 *30*	11.85 *42*	Coul Ex (x,x′γ)	1975To06

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.095 *5*	10.6 *6*	Electron Scatt	1983Li02
$^{56}_{24}Cr_{32}$ 1006.61 *20* keV			
$^{50}_{26}Fe_{24}$ 810 *80* keV			
$^{52}_{26}Fe_{26}$ 849.6 *7* keV			
$^{54}_{26}Fe_{28}$ 1408.19 *19* keV			
0.062 *5*	1.20 *10*	ADOPTED VALUE	
0.0510 *20*	1.45 *6*	Coul Ex (x,x′)	1965Si02
0.061 *14*	1.27 *29*	Coul Ex (x,x′γ)	1967Af03
0.060 *6*	1.24 *12*	Coul Ex (x,x′γ)	1971DaZM
0.070 *24*	1.19 *41*	Doppler Shift	1972Mo31
0.079 *12*	0.95 *14*	Doppler Shift	1972WaYZ
0.0676 *38*	1.09 *6*	Coul Ex (x,x′)	1981Le02
0.0533 *24*	1.39 *6*	Electron Scatt	1962Be18
0.0532 *33*	1.39 *9*	Electron Scatt	1972Li28
0.060 *6*	1.24 *12*	Electron Scatt	1975DeXW
$^{56}_{26}Fe_{30}$ 846.776 *5* keV			
0.0980 *40*	9.58 *39*	ADOPTED VALUE	
0.100 *20*	9.8 *20*	Coul Ex (x,x′γ)	1956Te26
0.070 *18*	14.3 *37*	Coul Ex (x,x′γ)	1959Al95
0.100 *25*	10.0 *25*	Coul Ex (x,x′γ)	1960Ad01
0.061 *12*	16.0 *31*	Coul Ex (x,x′γ)	1960An07
0.100 *20*	9.8 *20*	Coul Ex (x,x′γ)	1960Go08
0.123 *41*	8.6 *29*	Reson Fluor	1961Ke06
0.091 *15*	10.6 *17*	Reson Fluor	1961Me11
0.101 *19*	9.6 *18*	Reson Fluor	1963Be29
0.125 *43*	8.5 *29*	Reson Fluor	1964Bo22
0.097 *10*	9.8 *10*	Coul Ex (x,x′γ)	1964El03
0.083 *22*	12.1 *32*	Doppler Shift	1965Es01
0.097 *10*	9.8 *10*	Coul Ex (x,x′γ)	1967No04
0.095 *18*	10.3 *20*	Doppler Shift	1969Sp05
0.109 *15*	8.8 *12*	Coul Ex (x,x′γ)	1969Sp05
0.118 *12*	8.2 *8*	Coul Ex (x,x′γ)	1971DaZM
0.111 *6*	8.47 *46*	Coul Ex (x,x′)	1972Ca05
0.0970 *20*	9.66 *20*	Coul Ex (x,x′γ)	1972Le19
0.121 *18*	7.9 *12*	Recoil Dist	1974Po15
0.102 *5*	9.2 *5*	Coul Ex (x,x′)	1981Le02
0.0720 *35*	13.1 *6*	Electron Scatt	1962Be18
0.125 *27*	7.9 *17*	Electron Scatt	1970Pe15
0.0945 *45*	9.94 *47*	Electron Scatt	1971He08
0.0678 *48*	13.9 *10*	Electron Scatt	1972Li28
$^{58}_{26}Fe_{32}$ 810.784 *8* keV			
0.1200 *40*	9.71 *32*	ADOPTED VALUE	
0.20 *5*	6.2 *16*	Coul Ex (x,x′γ)	1959Al95
0.110 *22*	11.0 *22*	Coul Ex (x,x′γ)	1960An07
0.086 *5*	13.6 *8*	Coul Ex (x,x′γ)	1974ToZJ
0.37 *11*	3.4 *10*	Doppler Shift	1978Bo35
0.1234 *36*	9.44 *28*	Coul Ex (x,x′)	1981Le02
0.094 *8*	12.4 *11*	Electron Scatt	1972Li28
$^{60}_{26}Fe_{34}$ 823.63 *15* keV			
0.096 *18*	11.6 *22*	Recoil Dist	1977Wa10
$^{62}_{26}Fe_{36}$ 876.8 *3* keV			
$^{56}_{28}Ni_{28}$ 2700.6 *7* keV			
0.060 *12*	0.049 *10*	ADOPTED VALUE	
0.039 *17*	0.088 *37*	Doppler Shift	1973Sc28
0.060 *12*	0.049 *10*	Coul Ex (x,x′)	1995Kr17
$^{58}_{28}Ni_{30}$ 1454.0 *1* keV			
0.0695 *20*	0.904 *26*	ADOPTED VALUE	
0.100 *25*	0.67 *17*	Coul Ex (x,x′γ)	1959Al95
0.080 *16*	0.82 *16*	Coul Ex (x,x′γ)	1960An07
0.063 *13*	1.04 *22*	Coul Ex (x,x′γ)	1960Go08
0.072 *7*	0.88 *9*	Coul Ex (x,x′γ)	1962St02
0.113 *36*	0.62 *20*	Reson Fluor	1964Bo22
0.068 *9*	0.94 *12*	Doppler Shift	1969Be48
0.0731 *17*	0.860 *20*	Coul Ex (x,x′γ)	1970Le17
0.064 *6*	0.98 *9*	Reson Fluor	1970Me18
0.0680 *20*	0.924 *28*	Coul Ex (x,x′)	1971ChZT
0.0587 *42*	1.07 *8*	Reson Fluor	1972ArZD
0.071 *13*	0.92 *17*	Doppler Shift	1973BeYD
0.0660 *40*	0.95 *6*	Coul Ex (x,x′)	1973Ch13
0.071 *9*	0.90 *11*	Reson Fluor	1981Ca10
0.098 *13*	0.65 *9*	Electron Scatt	1961Cr01
0.0657 *11*	0.956 *16*	Electron Scatt	1967Du07
0.0554 *30*	1.14 *6*	Electron Scatt	1969Af01
0.0588 *40*	1.07 *7*	Electron Scatt	1983Kl09
$^{60}_{28}Ni_{32}$ 1332.518 *5* keV			
0.0933 *15*	1.041 *17*	ADOPTED VALUE	
0.091 *17*	1.10 *20*	Reson Fluor	1956Me59
0.160 *40*	0.65 *16*	Coul Ex (x,x′γ)	1959Al95
0.107 *32*	1.00 *30*	Reson Fluor	1959Bu12
0.110 *22*	0.92 *18*	Coul Ex (x,x′γ)	1960An07
0.120 *24*	0.84 *17*	Coul Ex (x,x′γ)	1960Go08
0.091 *8*	1.08 *9*	Coul Ex (x,x′γ)	1962St02
0.112 *23*	0.90 *18*	Reson Fluor	1967Be39
0.0928 *20*	1.047 *23*	Coul Ex (x,x′)	1969Cl05
0.0938 *20*	1.036 *22*	Reson Fluor	1970Me08
0.092 *12*	1.08 *14*	Reson Fluor	1970Me18
0.0910 *30*	1.069 *35*	Coul Ex (x,x′)	1971ChZF
0.082 *6*	1.20 *9*	Reson Fluor	1972ArZD
0.098 *7*	1.00 *7*	Doppler Shift	1973Fi15
0.081 *23*	1.30 *36*	Delayed Coinc	1976Kl04
0.123 *15*	0.80 *10*	Electron Scatt	1961Cr01
0.0845 *9*	1.150 *12*	Electron Scatt	1967Du07
0.0603 *28*	1.61 *7*	Electron Scatt	1969Af01
0.077 *8*	1.28 *13*	Electron Scatt	1969To08
0.087 *7*	1.12 *9*	Electron Scatt	1974Si01
0.1020 *40*	0.954 *37*	Electron Scatt	1974Ye01

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{62}_{28}Ni_{34}$ 1172.91 *9* keV			
0.0890 *25*	2.07 *6*	ADOPTED VALUE	
0.140 *35*	1.40 *35*	Coul Ex (x,x′γ)	1959Al95
0.085 *17*	2.25 *45*	Coul Ex (x,x′γ)	1960An07
0.083 *8*	2.23 *22*	Coul Ex (x,x′γ)	1962St02
0.081 *6*	2.28 *18*	Doppler Shift	1965Es01
0.084 *5*	2.20 *13*	Coul Ex (x,x′γ)	1969Ha31
0.0899 *28*	2.05 *6*	Coul Ex (x,x′γ)	1970Le17
0.0880 *30*	2.09 *7*	Coul Ex (x,x′)	1971ChZF
0.093 *22*	2.1 *5*	Reson Fluor	1977Ca14
0.118 *35*	1.7 *5*	Doppler Shift	1977OhZX
0.122 *20*	1.55 *25*	Doppler Shift	1978Ke11
0.122 *20*	1.55 *25*	Doppler Shift	1978KlZR
0.089 *17*	2.15 *42*	Reson Fluor	1981Ca10
0.0877 *11*	2.096 *27*	Electron Scatt	1967Du07
0.0618 *42*	2.99 *20*	Electron Scatt	1972Li28
0.102 *10*	1.82 *18*	Electron Scatt	1975DeXW
$^{64}_{28}Ni_{36}$ 1345.75 *5* keV			
0.076 *8*	1.23 *13*	ADOPTED VALUE	
0.090 *18*	1.07 *21*	Coul Ex (x,x′γ)	1959Al95
0.077 *15*	1.25 *24*	Coul Ex (x,x′γ)	1960An07
0.087 *17*	1.10 *22*	Coul Ex (x,x′γ)	1960An07
0.0650 *40*	1.43 *9*	Coul Ex (x,x′)	1971ChZF
0.27 *10*	0.40 *15*	Doppler Shift	1974Iv01
0.0650 *34*	1.43 *7*	Electron Scatt	1969Af01
0.0744 *20*	1.243 *34*	Electron Scatt	1988Br10
$^{66}_{28}Ni_{38}$ 1425.1 *3* keV			
0.062 *9*	1.13 *16*	Coul Ex (x,x′γ)	2000GuZZ
$^{68}_{28}Ni_{40}$ 2033.2 *2* keV			
0.026 *6*	0.47 *11*	Coul Ex (x,x′γ)	2000GuZZ
$^{70}_{28}Ni_{42}$ 1259.6 *2* keV			
$^{60}_{30}Zn_{30}$ 1004.1 *5* keV			
$^{62}_{30}Zn_{32}$ 954.0 *4* keV			
0.124 *9*	4.20 *30*	ADOPTED VALUE	
0.59 *44*	2.0 *15*	Doppler Shift	1977BrYO
0.124 *9*	4.20 *30*	Recoil Dist	1981Wa09
$^{64}_{30}Zn_{34}$ 991.55 *5* keV			
0.160 *15*	2.68 *25*	ADOPTED VALUE	
0.110 *22*	4.0 *8*	Coul Ex (x,x′γ)	1956Te26
0.110 *22*	4.0 *8*	Coul Ex (x,x′γ)	1960An07
0.170 *15*	2.52 *22*	Coul Ex (x,x′γ)	1962St02
0.108 *15*	4.0 *6*	Reson Fluor	1965Ta13
0.155 *11*	2.75 *20*	Reson Fluor	1972ArZD
0.176 *21*	2.46 *30*	Doppler Shift	1973Fi15
0.161 *12*	2.66 *20*	Coul Ex (x,x′γ)	1975Th01
0.158 *36*	2.9 *7*	Doppler Shift	1976Ch11
0.114 *28*	4.0 *10*	Recoil Dist	1977Al14
0.143 *14*	3.00 *30*	Reson Fluor	1977Ca14
0.144 *12*	2.97 *25*	Reson Fluor	1981Ca10
0.1680 *40*	2.54 *6*	Coul Ex (x,x′)	1988Sa32
0.162 *10*	2.64 *16*	Electron Scatt	1970Af04
0.155 *9*	2.76 *16*	Electron Scatt	1976Ne06
0.162 *9*	2.64 *15*	Electron Scatt	1977Ne05
$^{66}_{30}Zn_{36}$ 1039.39 *4* keV			
0.135 *10*	2.50 *19*	ADOPTED VALUE	
0.087 *17*	4.0 *8*	Coul Ex (x,x′γ)	1956Te26
0.110 *22*	3.2 *6*	Coul Ex (x,x′γ)	1960An07
0.145 *13*	2.34 *21*	Coul Ex (x,x′γ)	1962St02
0.18 *6*	2.0 *6*	Reson Fluor	1967Be39
0.138 *16*	2.46 *28*	Reson Fluor	1972ArZD
0.156 *21*	2.20 *30*	Reson Fluor	1972Ka22
0.18 *8*	2.2 *9*	Doppler Shift	1972Yo01
0.155 *13*	2.19 *18*	Doppler Shift	1973Fi15
0.154 *13*	2.20 *19*	Coul Ex (x,x′γ)	1975Th01
0.125 *9*	2.70 *20*	Reson Fluor	1977Ca14
0.125 *11*	2.71 *23*	Reson Fluor	1981Ca10
0.22 *11*	2.0 *10*	Doppler Shift	1981Zh07
0.168 *10*	2.01 *12*	Electron Scatt	1970Af04
0.180 *15*	1.88 *16*	Electron Scatt	1973Li24
0.137 *10*	2.47 *18*	Electron Scatt	1976Ne06
0.141 *8*	2.39 *14*	Electron Scatt	1977Ne05
$^{68}_{30}Zn_{38}$ 1077.37 *4* keV			
0.124 *15*	2.30 *28*	ADOPTED VALUE	
0.110 *22*	2.7 *5*	Coul Ex (x,x′γ)	1960An07
0.125 *11*	2.27 *20*	Coul Ex (x,x′γ)	1962St02
0.140 *16*	2.04 *23*	Reson Fluor	1972ArZD
0.126 *13*	2.26 *23*	Doppler Shift	1973Fi15
0.23 *5*	1.30 *30*	Doppler Shift	1974Iv01
0.105 *8*	2.70 *20*	Reson Fluor	1977Ca14
0.104 *9*	2.71 *23*	Reson Fluor	1981Ca10
0.108 *14*	2.65 *35*	Electron Scatt	1973Li24
0.111 *8*	2.55 *18*	Electron Scatt	1976Ne06
0.132 *7*	2.13 *11*	Electron Scatt	1977Ne05
$^{70}_{30}Zn_{40}$ 884.8 *1* keV			
0.160 *14*	4.74 *42*	ADOPTED VALUE	
0.160 *14*	4.74 *42*	Coul Ex (x,x′γ)	1962St02
0.205 *19*	3.70 *35*	Electron Scatt	1976Ne06
$^{72}_{30}Zn_{42}$ 652.5 *3* keV			
$^{74}_{30}Zn_{44}$ 605.82 *5* keV ($\alpha = 0.001110$)			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{76}_{30}$Zn$_{46}$ 598.68 10 keV ($\alpha = 0.001149$)			
$^{78}_{30}$Zn$_{48}$ 729.6 5 keV			
$^{64}_{32}$Ge$_{32}$ 901.7 3 keV			
$^{66}_{32}$Ge$_{34}$ 957.00 9 keV			
0.099 19	5.3 10	Recoil Dist	1979Wa23
$^{68}_{32}$Ge$_{36}$ 1015.99 8 keV			
0.143 21	2.70 40	ADOPTED VALUE	
0.25 13	2.0 10	Recoil Dist	1977Gu08
0.086 39	5.5 25	Doppler Shift	1977Mo20
0.141 47	3.0 10	Doppler Shift	1981De03
0.147 17	2.60 30	Doppler Shift	1982Pa03
$^{70}_{32}$Ge$_{38}$ 1039.25 6 keV			
0.1760 40	1.913 44	ADOPTED VALUE	
0.098 20	3.6 7	Coul Ex (x,x′γ)	1956Te26
0.180 27	1.91 29	Coul Ex (x,x′γ)	1962Er05
0.150 30	2.34 47	Coul Ex (x,x′γ)	1962Ga19
0.175 18	1.94 20	Coul Ex (x,x′γ)	1962St02
0.1790 30	1.881 32	Coul Ex (x,x′)	1969Si15
0.1754 46	1.92 5	Recoil Dist	1976He05
0.18 10	2.7 15	Doppler Shift	1977Mo20
0.1790 30	1.881 32	Coul Ex (x,x′)	1980Le16
0.19 5	1.9 5	Recoil Dist	1984Ef01
0.168 10	2.01 12	Electron Scatt	1975Kl10
$^{72}_{32}$Ge$_{40}$ 834.011 20 keV			
0.213 6	4.75 13	ADOPTED VALUE	
0.24 6	4.6 12	Reson Fluor	1956Me13
0.160 32	6.6 13	Coul Ex (x,x′γ)	1956Te26
0.210 30	4.9 7	Coul Ex (x,x′γ)	1962Er05
0.235 23	4.34 43	Coul Ex (x,x′γ)	1962St02
0.180 20	5.7 6	Coul Ex (x,x′γ)	1972Sa27
0.227 39	4.6 8	Reson Fluor	1973KaZV
0.2228 49	4.54 10	Recoil Dist	1976He05
0.24 10	5.0 20	Doppler Shift	1979Mo01
0.2080 30	4.86 7	Coul Ex (x,x′)	1980Le16
0.212 5	4.77 11	Coul Ex (x,x′)	1990Ko38
0.237 18	4.29 33	Electron Scatt	1975Kl10
$^{74}_{32}$Ge$_{42}$ 595.850 6 keV ($\alpha = 0.001387$)			
0.300 6	18.09 36	ADOPTED VALUE	
0.293 46	19.0 30	Reson Fluor	1956Me13
0.250 38	22.2 34	Coul Ex (x,x′γ)	1956Te26
0.320 30	17.1 16	Coul Ex (x,x′)	1960Wi18
0.300 45	18.5 28	Coul Ex (x,x′γ)	1962Er05
0.323 32	17.0 17	Coul Ex (x,x′γ)	1962St02
0.290 20	18.8 13	Coul Ex (x,x′γ)	1972Sa27

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.3050 30	17.79 18	Coul Ex (x,x′)	1980Le16
$^{76}_{32}$Ge$_{44}$ 562.93 3 keV ($\alpha = 0.00164$)			
0.268 8	26.9 8	ADOPTED VALUE	
0.230 35	32.1 49	Coul Ex (x,x′γ)	1956Te26
0.290 30	25.1 26	Coul Ex (x,x′)	1960Wi18
0.280 42	26.3 40	Coul Ex (x,x′γ)	1962Er05
0.268 26	27.1 26	Coul Ex (x,x′γ)	1962St02
0.260 5	27.7 5	Coul Ex (x,x′)	1969Si15
0.270 20	26.8 20	Coul Ex (x,x′γ)	1972Sa27
0.2780 30	25.93 29	Coul Ex (x,x′)	1980Le16
$^{78}_{32}$Ge$_{46}$ 619.34 13 keV ($\alpha = 0.001240$)			
$^{80}_{32}$Ge$_{48}$ 659.15 4 keV ($\alpha = 0.001039$)			
$^{82}_{32}$Ge$_{50}$ 1348.04 6 keV			
$^{68}_{34}$Se$_{34}$ 854.2 3 keV			
$^{70}_{34}$Se$_{36}$ 944.6 10 keV			
0.38 8	1.50 30	ADOPTED VALUE	
0.36 9	1.60 40	Recoil Dist	1975GuYV
0.38 8	1.50 30	Recoil Dist	1986He17
$^{72}_{34}$Se$_{38}$ 862.08 9 keV			
0.207 25	4.2 5	ADOPTED VALUE	
0.157 33	5.7 12	Recoil Dist	1974SaZH
0.170 20	5.1 6	Recoil Dist	1975GuYW
0.29 6	3.1 6	Recoil Dist	1975Lo08
0.166 16	5.2 5	Recoil Dist	1978He13
0.181 23	4.8 6	Doppler Shift	1979Ki17
0.254 23	3.40 30	Recoil Dist	1986He17
0.202 24	4.3 5	Doppler Shift	1988MyZY
$^{74}_{34}$Se$_{40}$ 634.75 7 keV ($\alpha = 0.001361$)			
0.387 8	10.22 22	ADOPTED VALUE	
0.88 44	6.0 30	Reson Fluor	1955Me10
0.210 30	19.2 28	Coul Ex (x,x′γ)	1956Te26
0.44 8	9.3 17	Coul Ex (x,x′γ)	1961An07
0.42 13	10.4 32	Coul Ex (x,x′γ)	1970AgZV
0.370 15	10.71 44	Coul Ex (x,x′γ)	1974Ba80
0.388 5	10.20 14	Coul Ex (x,x′)	1978Le22
0.375 29	10.6 8	Doppler Shift	1979Ki17
$^{76}_{34}$Se$_{42}$ 559.102 5 keV ($\alpha = 0.00197$)			
0.420 10	17.76 42	ADOPTED VALUE	
0.39 26	33 22	Delayed Coinc	1955Co55
0.43 6	17.7 25	Coul Ex (x,x′γ)	1956Te26
0.42 8	18.5 37	Coul Ex (x,x′γ)	1960An07
0.59 9	13.0 20	Reson Fluor	1960De08

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.480 *43*	15.7 *14*	Coul Ex (x,x′γ)	1962St02
0.50 *5*	15.2 *16*	Reson Fluor	1963Pr04
0.390 *40*	19.3 *20*	Coul Ex (x,x′γ)	1970AgZV
0.423 *6*	17.63 *25*	Coul Ex (x,x′)	1977Le11
0.419 *43*	18.0 *18*	Coul Ex (x,x′γ)	1995Ka29
$^{78}_{34}$Se$_{44}$ 613.727 *3* keV ($\alpha = 0.001498$)			
0.335 *9*	13.98 *38*	ADOPTED VALUE	
0.36 *5*	13.3 *20*	Coul Ex (x,x′γ)	1956Te26
0.36 *7*	13.5 *27*	Coul Ex (x,x′γ)	1960Le07
0.350 *30*	13.5 *12*	Coul Ex (x,x′γ)	1962Ga13
0.385 *35*	12.3 *11*	Coul Ex (x,x′γ)	1962St02
0.327 *7*	14.32 *31*	Coul Ex (x,x′)	1977Le11
0.40 *7*	12.0 *20*	Doppler Shift	1987Sc07
$^{80}_{34}$Se$_{46}$ 666.16 *8* keV ($\alpha = 0.001189$)			
0.253 *6*	12.29 *30*	ADOPTED VALUE	
0.230 *34*	13.8 *20*	Coul Ex (x,x′γ)	1956Te26
0.230 *46*	14.1 *28*	Coul Ex (x,x′γ)	1960An07
0.260 *20*	12.0 *9*	Coul Ex (x,x′γ)	1962Ga13
0.283 *25*	11.1 *10*	Coul Ex (x,x′γ)	1962St02
0.240 *30*	13.2 *17*	Coul Ex (x,x′γ)	1970AgZV
0.2520 *40*	12.33 *20*	Coul Ex (x,x′)	1977Le11
0.238 *26*	13.2 *15*	Coul Ex (x,x′γ)	1995Ka29
$^{82}_{34}$Se$_{48}$ 654.69 *16* keV ($\alpha = 0.001248$)			
0.182 *5*	18.6 *5*	ADOPTED VALUE	
0.190 *38*	18.6 *37*	Coul Ex (x,x′γ)	1960An07
0.213 *19*	16.0 *14*	Coul Ex (x,x′γ)	1962St02
0.170 *40*	21 *5*	Coul Ex (x,x′γ)	1970AgZV
0.1800 *30*	18.83 *34*	Coul Ex (x,x′)	1977Le11
0.179 *19*	19.1 *21*	Coul Ex (x,x′γ)	1995Ka29
$^{84}_{34}$Se$_{50}$ 1454.42 *9* keV			
$^{86}_{34}$Se$_{52}$ 704.1 *10* keV ($\alpha = 0.001022$)			
$^{72}_{36}$Kr$_{36}$ 709.1 *3* keV ($\alpha = 0.001173$)			
$^{74}_{36}$Kr$_{38}$ 455.80 *10* keV ($\alpha = 0.00425$)			
0.84 *10*	25.0 *30*	ADOPTED VALUE	
0.74 *15*	29 *6*	Recoil Dist	1984Ro01
0.89 *8*	23.5 *20*	Recoil Dist	1990Ta12
$^{76}_{36}$Kr$_{40}$ 423.96 *7* keV ($\alpha = 0.00534$)			
0.824 *24*	36.0 *10*	ADOPTED VALUE	
0.57 *8*	53 *7*	Recoil Dist	1974No08
0.85 *7*	35.0 *30*	Recoil Dist	1982Ke01
0.824 *24*	36.0 *10*	Recoil Dist	1984Wo10
0.79 *6*	37.7 *30*	Recoil Dist	1990He04
$^{78}_{36}$Kr$_{42}$ 455.04 *3* keV ($\alpha = 0.00427$)			
0.633 *39*	33.0 *20*	ADOPTED VALUE	
0.54 *13*	41 *10*	Coul Ex (x,x′γ)	1957He48
0.59 *7*	36.1 *43*	Recoil Dist	1974No08
0.653 *41*	32.0 *20*	Recoil Dist	1979He07
0.64 *5*	32.5 *25*	Doppler Shift	1981AnZY
0.520 *40*	40.3 *31*	Coul Ex (x,x′γ)	1981Ca01
0.64 *6*	33.0 *30*	Doppler Shift	1985Wi01
0.686 *30*	30.4 *13*	Recoil Dist	1990Ga22
$^{80}_{36}$Kr$_{44}$ 616.61 *9* keV ($\alpha = 0.00172$)			
0.370 *21*	12.4 *7*	ADOPTED VALUE	
0.361 *20*	12.7 *7*	Recoil Dist	1975Fr04
0.384 *32*	12.0 *10*	Doppler Shift	1981Fu03
$^{82}_{36}$Kr$_{46}$ 776.521 *3* keV			
0.223 *10*	6.49 *29*	ADOPTED VALUE	
0.19 *5*	8.2 *21*	Coul Ex (x,x′γ)	1957He48
0.215 *34*	6.9 *11*	Reson Fluor	1966Be16
0.227 *16*	6.39 *45*	Coul Ex (x,x′γ)	1981Ca01
0.225 *9*	6.43 *26*	Coul Ex (x,x′γ)	1982Ke01
$^{84}_{36}$Kr$_{48}$ 881.615 *3* keV			
0.125 *6*	6.14 *29*	ADOPTED VALUE	
0.160 *40*	5.1 *13*	Coul Ex (x,x′γ)	1957He48
0.123 *12*	6.3 *6*	Coul Ex (x,x′γ)	1981Ca01
0.122 *5*	6.29 *26*	Coul Ex (x,x′γ)	1982Ke01
0.18 *7*	5.0 *20*	Recoil Dist	1985Ro22
$^{86}_{36}$Kr$_{50}$ 1564.87 *9* keV			
0.122 *10*	0.359 *30*	ADOPTED VALUE	
0.104 *30*	0.46 *13*	Coul Ex (x,x′γ)	1981Ca01
0.128 *10*	0.342 *27*	Coul Ex (x,x′)	1981Ji03
$^{88}_{36}$Kr$_{52}$ 775.31 *4* keV			
$^{90}_{36}$Kr$_{54}$ 707.13 *5* keV ($\alpha = 0.001182$)			
$^{92}_{36}$Kr$_{56}$ 769 *2* keV			
$^{94}_{36}$Kr$_{58}$ 665 *2* keV ($\alpha = 0.001396$)			
$^{76}_{38}$Sr$_{38}$ 260.9 *2* keV ($\alpha = 0.0312$)			
$^{78}_{38}$Sr$_{40}$ 278.5 *10* keV ($\alpha = 0.0248$)			
1.08 *15*	224 *27*	Recoil Dist	1982Li08
$^{80}_{38}$Sr$_{42}$ 385.86 *4* keV ($\alpha = 0.00828$)			
0.959 *36*	49.4 *18*	ADOPTED VALUE	
0.76 *10*	63 *9*	Recoil Dist	1974No08

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.85 *15*	58 *10*	Recoil Dist	1982HiZT
0.89 *7*	53.4 *43*	Recoil Dist	1982Li08
0.959 *36*	49.4 *18*	Recoil Dist	1990He04
$^{82}_{38}$Sr$_{44}$ 573.54 *8* keV ($\alpha = 0.00245$)			
0.513 *20*	12.8 *5*	ADOPTED VALUE	
0.513 *20*	12.8 *5*	Recoil Dist	1981DeYW
0.44 *9*	15.4 *31*	Recoil Dist	1996Jo05
$^{84}_{38}$Sr$_{46}$ 793.30 *9* keV ($\alpha = 0.001016$)			
0.289 *44*	4.6 *7*	ADOPTED VALUE	
0.16 *5*	9.0 *28*	Coul Ex (x,x′γ)	1963Al31
0.23 *10*	7.0 *30*	Doppler Shift	1980Ek03
0.285 *31*	4.6 *5*	Recoil Dist	1982De05
$^{86}_{38}$Sr$_{48}$ 1076.68 *4* keV			
0.128 *14*	2.23 *24*	ADOPTED VALUE	
0.087 *26*	3.6 *11*	Coul Ex (x,x′γ)	1963Al31
0.118 *16*	2.43 *33*	Coul Ex (x,x′γ)	1964Sy01
0.136 *14*	2.10 *22*	Doppler Shift	1988Ku01
0.121 *5*	2.33 *10*	Electron Scatt	1992Ki20
$^{88}_{38}$Sr$_{50}$ 1836.087 *9* keV			
0.092 *5*	0.213 *12*	ADOPTED VALUE	
0.135 *35*	0.155 *40*	Reson Fluor	1959Of14
0.114 *15*	0.174 *23*	Coul Ex (x,x′)	1973Ch13
0.0876 *45*	0.224 *11*	Reson Fluor	1977Me10
0.090 *9*	0.219 *23*	Doppler Shift	1988Ku01
0.140 *10*	0.140 *10*	Electron Scatt	1956He83
0.099 *5*	0.198 *10*	Electron Scatt	1968Pe02
0.0822 *24*	0.238 *7*	Electron Scatt	1974Fi05
$^{90}_{38}$Sr$_{52}$ 831.68 *4* keV			
0.113 *34*	10.0 *30*	Delayed Coinc	1991Ma05
$^{92}_{38}$Sr$_{54}$ 814.98 *4* keV			
0.114 *48*	12 *5*	Delayed Coinc	1991Ma05
$^{94}_{38}$Sr$_{56}$ 836.91 *10* keV			
0.118 *47*	10.0 *40*	Delayed Coinc	1991Ma05
$^{96}_{38}$Sr$_{58}$ 814.93 *8* keV			
0.24 *14*	7.0 *40*	Delayed Coinc	1991Ma05
$^{98}_{38}$Sr$_{60}$ 144.225 *6* keV ($\alpha = 0.264$)			
1.282 *39*	4040 *110*	ADOPTED VALUE	
1.01 *11*	5200 *600*	Delayed Coinc	1979Az01
1.4 *7*	4700 *2200*	Delayed Coinc	1980ChZM
0.96 *24*	5800 *1400*	Delayed Coinc	1980Sc13
1.31 *6*	3950 *170*	Delayed Coinc	1987Oh05
1.282 *39*	4040 *110*	Delayed Coinc	1989Ma38
$^{100}_{38}$Sr$_{62}$ 129.7 *5* keV ($\alpha = 0.389$)			
1.42 *8*	5640 *230*	ADOPTED VALUE	
1.08 *6*	7430 *290*	Delayed Coinc	1979Az01
1.42 *8*	5640 *230*	Delayed Coinc	1990Lh01
$^{102}_{38}$Sr$_{64}$ 126.0 *3* keV ($\alpha = 0.432$)			
$^{80}_{40}$Zr$_{40}$ 289.9 *3* keV ($\alpha = 0.0243$)			
$^{82}_{40}$Zr$_{42}$ 407.30 *20* keV ($\alpha = 0.00788$)			
0.91 *9*	40.0 *40*	ADOPTED VALUE	
0.91 *9*	40.0 *40*	Recoil Dist	1993Ch41
1.4 *6*	32 *13*	Recoil Dist	1997Pa07
$^{84}_{40}$Zr$_{44}$ 540.0 *3* keV ($\alpha = 0.00333$)			
0.438 *25*	20.3 *11*	Recoil Dist	1983Pr08
$^{86}_{40}$Zr$_{46}$ 751.75 *3* keV ($\alpha = 0.001345$)			
0.166 *31*	10.6 *20*	Recoil Dist	1978Av02
$^{88}_{40}$Zr$_{48}$ 1057.03 *4* keV			
0.26 *8*	1.33 *43*	Doppler Shift	1973BeYD
$^{90}_{40}$Zr$_{50}$ 2186.274 *15* keV			
0.0610 *40*	0.135 *9*	ADOPTED VALUE	
0.042 *15*	0.22 *8*	Coul Ex (x,x′γ)	1965Ga05
0.0608 *35*	0.135 *8*	Reson Fluor	1972Me04
0.118 *33*	0.075 *21*	Doppler Shift	1973BeYD
0.104 *13*	0.080 *10*	Doppler Shift	1973RaWV
0.0609 *35*	0.135 *8*	Reson Fluor	1974Me13
0.072 *9*	0.115 *14*	Reson Fluor	1974Si01
0.069 *11*	0.121 *20*	Doppler Shift	1993Sa38
0.0830 *19*	0.0985 *23*	Electron Scatt	1970Be07
0.0400 *20*	0.205 *10*	Electron Scatt	1971MiZK
0.060 *6*	0.138 *14*	Electron Scatt	1975DeXW
0.067 *6*	0.122 *11*	Electron Scatt	1975Si21
$^{92}_{40}$Zr$_{52}$ 934.49 *5* keV			
0.083 *6*	6.9 *5*	ADOPTED VALUE	
0.094 *19*	6.3 *13*	Coul Ex (x,x′γ)	1963Al31
0.079 *20*	7.7 *20*	Coul Ex (x,x′γ)	1969Ga25
0.080 *6*	7.2 *5*	Coul Ex (x,x′γ)	1981Yo07
$^{94}_{40}$Zr$_{54}$ 918.75 *5* keV			
0.066 *14*	9.9 *21*	ADOPTED VALUE	
0.081 *17*	8.0 *17*	Coul Ex (x,x′γ)	1963Al31
0.056 *14*	11.9 *30*	Coul Ex (x,x′γ)	1969Ga25
$^{96}_{40}$Zr$_{56}$ 1750.498 *16* keV			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.055 *22*	0.54 *21*	Coul Ex (x,x′γ)	1965Ga05
$^{98}_{40}Zr_{58}$ 1222.93 *12* keV			
$^{100}_{40}Zr_{60}$ 212.530 *9* keV ($\alpha = 0.0719$)			
1.11 *6*	790 *40*	ADOPTED VALUE	
1.23 *26*	750 *160*	Delayed Coinc	1970Ch11
0.854 *37*	1030 *43*	Delayed Coinc	1975JaYL
1.01 *16*	890 *140*	Delayed Coinc	1980ChZM
3.2 *5*	286 *46*	Recoil Dist	1983MaYT
1.59 *33*	580 *120*	Delayed Coinc	1989Lh01
1.109 *42*	793 *29*	Delayed Coinc	1989Ma47
1.13 *9*	780 *60*	Delayed Coinc	1989Oh06
$^{102}_{40}Zr_{62}$ 151.77 *13* keV ($\alpha = 0.241$)			
1.66 *34*	2600 *500*	ADOPTED VALUE	
3.4 *7*	1240 *250*	Delayed Coinc	1970Ch11
1.76 *42*	2500 *600*	Delayed Coinc	1970Wa05
1.29 *11*	3190 *250*	Delayed Coinc	1975JaYL
1.67 *15*	2470 *200*	Delayed Coinc	1980ChZM
$^{104}_{40}Zr_{64}$ 140.3 *10* keV ($\alpha = 0.321$)			
$^{84}_{42}Mo_{42}$ 443.8 *3* keV ($\alpha = 0.00679$)			
$^{86}_{42}Mo_{44}$ 566.6 *4* keV ($\alpha = 0.00330$)			
$^{88}_{42}Mo_{46}$ 740.53 *5* keV ($\alpha = 0.00160$)			
$^{90}_{42}Mo_{48}$ 947.97 *9* keV			
$^{92}_{42}Mo_{50}$ 1509.49 *3* keV			
0.097 *6*	0.539 *33*	ADOPTED VALUE	
0.19 *8*	0.33 *14*	Coul Ex (x,x′γ)	1962Af02
0.093 *14*	0.57 *9*	Coul Ex (x,x′γ)	1964St04
0.107 *6*	0.488 *27*	Coul Ex (x,x′γ)	1971WaZP
0.13 *5*	0.47 *18*	Doppler Shift	1971Yo02
0.099 *17*	0.55 *10*	Doppler Shift	1973DoZB
0.090 *6*	0.582 *36*	Reson Fluor	1977Me01
$^{94}_{42}Mo_{52}$ 871.096 *18* keV ($\alpha = 0.001069$)			
0.2030 *40*	4.00 *8*	ADOPTED VALUE	
0.290 *44*	2.87 *44*	Coul Ex (x,x′γ)	1956Te26
0.270 *35*	3.06 *40*	Coul Ex (x,x′γ)	1958St32
0.230 *40*	3.6 *6*	Coul Ex (x,x′γ)	1962Er05
0.43 *11*	2.0 *5*	Reson Fluor	1966Be53
0.204 *10*	4.00 *20*	Doppler Shift	1971SiYA
0.208 *12*	3.92 *23*	Coul Ex (x,x′γ)	1971WaZP
0.206 *11*	3.96 *21*	Coul Ex (x,x′γ)	1972Ba90
0.189 *9*	4.30 *20*	Doppler Shift	1972SiZP
0.1960 *30*	4.15 *6*	Coul Ex (x,x′)	1976Pa13
$^{96}_{42}Mo_{54}$ 778.245 *12* keV ($\alpha = 0.001411$)			
0.271 *5*	5.27 *10*	ADOPTED VALUE	
0.310 *47*	4.7 *7*	Coul Ex (x,x′γ)	1956Te26
0.302 *39*	4.8 *6*	Coul Ex (x,x′γ)	1958St32
0.240 *40*	6.1 *10*	Coul Ex (x,x′γ)	1962Er05
0.255 *9*	5.60 *20*	Doppler Shift	1971SiYA
0.288 *16*	4.97 *28*	Coul Ex (x,x′γ)	1971WaZP
0.284 *14*	5.04 *25*	Coul Ex (x,x′γ)	1972Ba90
0.286 *11*	5.00 *20*	Doppler Shift	1972SiZP
0.2700 *40*	5.29 *8*	Coul Ex (x,x′)	1976Pa13
$^{98}_{42}Mo_{56}$ 787.384 *13* keV ($\alpha = 0.001370$)			
0.267 *9*	5.05 *17*	ADOPTED VALUE	
0.270 *40*	5.1 *8*	Coul Ex (x,x′γ)	1956Te26
0.270 *32*	5.1 *6*	Coul Ex (x,x′γ)	1958St32
0.260 *40*	5.3 *8*	Coul Ex (x,x′γ)	1962Er05
0.275 *15*	4.91 *27*	Coul Ex (x,x′γ)	1971WaZP
0.286 *14*	4.73 *23*	Coul Ex (x,x′γ)	1972Ba90
0.259 *10*	5.20 *20*	Doppler Shift	1972SiZP
0.2650 *40*	5.08 *8*	Coul Ex (x,x′)	1976Pa13
0.2670 *40*	5.04 *8*	Coul Ex (x,x′)	1979Pa11
$^{100}_{42}Mo_{58}$ 535.57 *3* keV ($\alpha = 0.00387$)			
0.516 *10*	17.89 *35*	ADOPTED VALUE	
0.66 *10*	14.3 *22*	Coul Ex (x,x′γ)	1956Te26
0.61 *6*	15.2 *15*	Coul Ex (x,x′γ)	1958St32
0.63 *10*	15.0 *24*	Coul Ex (x,x′γ)	1962Er05
0.526 *26*	17.6 *9*	Coul Ex (x,x′γ)	1972Ba90
0.471 *24*	19.6 *10*	Recoil Dist	1975Bo39
0.511 *9*	18.06 *32*	Coul Ex (x,x′)	1976Pa13
$^{102}_{42}Mo_{60}$ 296.597 *12* keV ($\alpha = 0.0250$)			
0.963 *31*	180 *6*	ADOPTED VALUE	
1.07 *12*	164 *19*	Recoil Dist	1975Bo39
0.963 *31*	180 *6*	Delayed Coinc	1991Li39
$^{104}_{42}Mo_{62}$ 192.3 *2* keV ($\alpha = 0.1133$)			
1.34 *8*	1040 *60*	ADOPTED VALUE	
2.24 *46*	650 *130*	Delayed Coinc	1970Ch11
1.062 *41*	1314 *43*	Delayed Coinc	1975JaYL
1.11 *13*	1270 *140*	Delayed Coinc	1980ChZM
1.34 *8*	1040 *60*	Delayed Coinc	1991Li39
$^{106}_{42}Mo_{64}$ 171.548 *8* keV ($\alpha = 0.170$)			
1.31 *7*	1800 *100*	ADOPTED VALUE	
2.26 *46*	1080 *220*	Delayed Coinc	1970Ch11
1.302 *33*	1803 *43*	Delayed Coinc	1975JaYL
1.22 *9*	1930 *140*	Delayed Coinc	1980ChZM

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
4.5 *7*	540 *80*	Recoil Dist	1983MaYT
$^{108}_{42}$Mo$_{66}$ 192.9 *10* keV ($\alpha = 0.1120$)			
1.6 *5*	940 *270*	ADOPTED VALUE	
3.0 *19*	720 *430*	Delayed Coinc	1996Pe25
1.6 *5*	940 *270*	Delayed Coinc	1998LhZZ
$^{88}_{44}$Ru$_{44}$ 616 *2* keV ($\alpha = 0.00296$)			
$^{90}_{44}$Ru$_{46}$ 738.1 *10* keV ($\alpha = 0.00184$)			
$^{92}_{44}$Ru$_{48}$ 864.6 *10* keV ($\alpha = 0.001242$)			
$^{94}_{44}$Ru$_{50}$ 1430.51 *22* keV			
$^{96}_{44}$Ru$_{52}$ 832.57 *5* keV ($\alpha = 0.001360$)			
0.251 *10*	4.07 *16*	ADOPTED VALUE	
0.254 *41*	4.1 *7*	Coul Ex (x,x′γ)	1958St32
0.268 *32*	3.86 *46*	Coul Ex (x,x′γ)	1968Mc08
0.260 *10*	3.92 *15*	Coul Ex (x,x′)	1978Fa08
0.266 *26*	3.87 *38*	Coul Ex (x,x′γ)	1980La01
0.236 *7*	4.32 *13*	Coul Ex (x,x′)	1980La01
$^{98}_{44}$Ru$_{54}$ 652.44 *4* keV ($\alpha = 0.00253$)			
0.392 *12*	8.79 *27*	ADOPTED VALUE	
0.475 *38*	7.3 *6*	Coul Ex (x,x′γ)	1958St32
0.411 *35*	8.4 *7*	Coul Ex (x,x′γ)	1968Mc08
0.389 *31*	8.9 *7*	Coul Ex (x,x′γ)	1980La01
0.373 *7*	9.23 *18*	Coul Ex (x,x′)	1980La01
$^{100}_{44}$Ru$_{56}$ 539.506 *5* keV ($\alpha = 0.00428$)			
0.490 *5*	18.15 *19*	ADOPTED VALUE	
0.30 *6*	31 *6*	Coul Ex (x,x′γ)	1956Te26
0.572 *40*	15.6 *11*	Coul Ex (x,x′γ)	1958St32
0.520 *44*	17.2 *15*	Coul Ex (x,x′γ)	1968Mc08
0.4930 *30*	18.03 *11*	Coul Ex (x,x′)	1980HiZV
0.482 *26*	18.5 *10*	Coul Ex (x,x′γ)	1980La01
0.494 *6*	18.00 *22*	Coul Ex (x,x′)	1980La01
0.471 *14*	18.9 *6*	Coul Ex (x,x′)	1996Go36
0.4930 *40*	18.03 *15*	Coul Ex (x,x′)	1998Hi01
$^{102}_{44}$Ru$_{58}$ 475.079 *24* keV ($\alpha = 0.00620$)			
0.630 *10*	26.61 *43*	ADOPTED VALUE	
0.63 *10*	27.3 *43*	Coul Ex (x,x′γ)	1956Te26
0.73 *5*	23.0 *16*	Coul Ex (x,x′γ)	1958St32
0.98 *16*	17.6 *29*	Delayed Coinc	1963De21
0.66 *6*	25.6 *22*	Coul Ex (x,x′γ)	1968Mc08
0.617 *5*	27.16 *23*	Coul Ex (x,x′)	1979Bo28
0.651 *35*	25.8 *14*	Coul Ex (x,x′γ)	1980La01
0.640 *6*	26.19 *25*	Coul Ex (x,x′)	1980La01
0.645 *35*	26.1 *14*	Recoil Dist	1989Lo08
0.6348 *26*	26.40 *10*	Doppler Shift	1995Ef01
0.585 *16*	28.7 *8*	Coul Ex (x,x′)	1996Go36
0.614 *5*	27.30 *23*	Coul Ex (x,x′)	1998Hi01
$^{104}_{44}$Ru$_{60}$ 358.02 *7* keV ($\alpha = 0.01494$)			
0.820 *12*	83.4 *13*	ADOPTED VALUE	
1.04 *16*	67 *10*	Coul Ex (x,x′γ)	1956Te26
0.93 *7*	74 *5*	Coul Ex (x,x′γ)	1958St32
0.82 *6*	84 *6*	Coul Ex (x,x′γ)	1968Mc08
0.834 *44*	82.2 *44*	Coul Ex (x,x′γ)	1980La01
0.834 *7*	82.0 *8*	Coul Ex (x,x′)	1980La01
0.778 *24*	88.0 *28*	Coul Ex (x,x′)	1996Go36
0.807 *8*	84.7 *9*	Coul Ex (x,x′)	1998Hi01
$^{106}_{44}$Ru$_{62}$ 270.07 *4* keV ($\alpha = 0.0381$)			
0.77 *20*	380 *100*	Delayed Coinc	1995Sc24
$^{108}_{44}$Ru$_{64}$ 242.24 *7* keV ($\alpha = 0.0553$)			
1.01 *15*	470 *70*	ADOPTED VALUE	
1.54 *35*	320 *70*	Delayed Coinc	1970Ch11
0.94 *8*	498 *43*	Delayed Coinc	1975JaYL
0.81 *14*	590 *100*	Delayed Coinc	1995Sc24
$^{110}_{44}$Ru$_{66}$ 240.71 *10* keV ($\alpha = 0.0566$)			
1.05 *12*	460 *50*	ADOPTED VALUE	
1.51 *33*	330 *70*	Delayed Coinc	1970Ch11
0.99 *12*	490 *60*	Delayed Coinc	1975JaYL
1.11 *8*	433 *29*	Delayed Coinc	1980ChZM
0.68 *11*	720 *120*	Delayed Coinc	1995Sc24
$^{112}_{44}$Ru$_{68}$ 236.66 *17* keV ($\alpha = 0.0600$)			
1.17 *23*	460 *90*	ADOPTED VALUE	
1.87 *38*	290 *60*	Delayed Coinc	1970Ch11
1.13 *11*	462 *43*	Delayed Coinc	1975JaYL
0.76 *10*	690 *90*	Delayed Coinc	1980ChZM
$^{114}_{44}$Ru$_{70}$ 127.0 *10* keV ($\alpha = 0.545$)			
$^{94}_{46}$Pd$_{48}$ 814 *2* keV ($\alpha = 0.00163$)			
$^{96}_{46}$Pd$_{50}$ 1415.4 *10* keV			
$^{98}_{46}$Pd$_{52}$ 863.1 *3* keV ($\alpha = 0.001416$)			
$^{100}_{46}$Pd$_{54}$ 665.56 *15* keV ($\alpha = 0.00271$)			
$^{102}_{46}$Pd$_{56}$ 556.43 *4* keV ($\alpha = 0.00440$)			
0.460 *30*	16.6 *11*	ADOPTED VALUE	
0.460 *30*	16.6 *11*	Coul Ex (x,x′)	1977La16

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.460 *30*	16.6 *11*	Coul Ex (x,x′γ)	1980LuZT
$^{104}_{46}$Pd$_{58}$ 555.81 *4* keV		($\alpha = 0.00441$)	
0.535 *35*	14.4 *9*	ADOPTED VALUE	
0.46 *7*	17.1 *26*	Coul Ex (x,x′γ)	1956Te26
0.547 *38*	14.1 *10*	Coul Ex (x,x′γ)	1958St32
0.61 *9*	12.8 *19*	Coul Ex (x,x′γ)	1962Er05
0.55 *5*	14.1 *13*	Coul Ex (x,x′γ)	1968MiZZ
0.51 *5*	15.2 *15*	Coul Ex (x,x′γ)	1970Ch01
0.531 *40*	14.5 *11*	Coul Ex (x,x′γ)	1971Bo08
0.510 *30*	15.1 *9*	Coul Ex (x,x′γ)	1980LuZT
0.540 *30*	14.2 *8*	Electron Scatt	1991We15
$^{106}_{46}$Pd$_{60}$ 511.851 *23* keV		($\alpha = 0.00558$)	
0.660 *35*	17.6 *9*	ADOPTED VALUE	
0.59 *9*	20.1 *31*	Coul Ex (x,x′γ)	1956Te26
0.646 *45*	18.0 *13*	Coul Ex (x,x′γ)	1958St32
0.61 *9*	19.4 *29*	Coul Ex (x,x′γ)	1962Er05
0.710 *40*	16.3 *9*	Coul Ex (x,x′γ)	1969Ro05
0.61 *6*	19.1 *19*	Coul Ex (x,x′γ)	1970Ch01
0.689 *37*	16.8 *9*	Coul Ex (x,x′γ)	1971Bo08
0.66 *21*	20 *6*	Reson Fluor	1977Ga06
0.650 *40*	17.8 *11*	Recoil Dist	1989Lo08
0.62 *6*	18.7 *19*	Coul Ex (x,x′γ)	1995Sv01
0.74 *8*	15.8 *17*	Electron Scatt	1973Ho05
0.590 *20*	19.6 *7*	Electron Scatt	1991We15
$^{108}_{46}$Pd$_{62}$ 433.938 *5* keV		($\alpha = 0.00909$)	
0.760 *40*	34.7 *18*	ADOPTED VALUE	
0.78 *12*	35 *5*	Coul Ex (x,x′γ)	1956Te26
0.74 *5*	35.6 *25*	Coul Ex (x,x′γ)	1958St32
0.78 *6*	33.9 *26*	Coul Ex (x,x′γ)	1962Ec01
0.82 *12*	32.8 *48*	Coul Ex (x,x′γ)	1962Er05
0.76 *5*	34.7 *23*	Coul Ex (x,x′γ)	1969Ro05
0.79 *5*	33.3 *21*	Coul Ex (x,x′γ)	1971Bo08
0.70 *7*	37.9 *38*	Coul Ex (x,x′γ)	1971Ha08
0.770 *40*	34.2 *18*	Recoil Dist	1989Lo08
0.76 *9*	35.2 *40*	Coul Ex (x,x′γ)	1995Sv01
0.805 *29*	32.7 *12*	Electron Scatt	1978Ar07
0.810 *30*	32.5 *12*	Electron Scatt	1991We15
$^{110}_{46}$Pd$_{64}$ 373.81 *6* keV		($\alpha = 0.01443$)	
0.870 *40*	63.5 *30*	ADOPTED VALUE	
1.04 *16*	54 *8*	Coul Ex (x,x′γ)	1956Te26
0.86 *6*	64.4 *46*	Coul Ex (x,x′γ)	1958St32
0.91 *7*	60.9 *47*	Coul Ex (x,x′γ)	1962Ec01
0.78 *12*	72 *11*	Coul Ex (x,x′γ)	1962Er05
0.91 *6*	60.8 *41*	Coul Ex (x,x′γ)	1969Ro05
0.88 *6*	62.9 *43*	Coul Ex (x,x′γ)	1971Bo08
0.82 *8*	68 *7*	Coul Ex (x,x′γ)	1971Ha08
0.842 *33*	65.6 *25*	Recoil Dist	1989Ko40
0.80 *7*	69 *6*	Electron Scatt	1976Li19
0.870 *30*	63.4 *22*	Electron Scatt	1991We15
$^{112}_{46}$Pd$_{66}$ 348.79 *17* keV		($\alpha = 0.0180$)	
0.66 *11*	121 *20*	Recoil Dist	1986Ma22
$^{114}_{46}$Pd$_{68}$ 332.50 *24* keV		($\alpha = 0.0210$)	
0.38 *12*	290 *90*	ADOPTED VALUE	
0.38 *12*	290 *90*	Delayed Coinc	1975JaYL
0.203 *43*	500 *100*	Recoil Dist	1986Ma22
$^{116}_{46}$Pd$_{70}$ 340.6 *3* keV		($\alpha = 0.0194$)	
0.62 *18*	153 *43*	Delayed Coinc	1975JaYL
$^{118}_{46}$Pd$_{72}$ 378.4 *2* keV		($\alpha = 0.01389$)	
$^{98}_{48}$Cd$_{50}$ 1394.7 *3* keV			
$^{100}_{48}$Cd$_{52}$ 1004.5 *3* keV		($\alpha = 0.001130$)	
$^{102}_{48}$Cd$_{54}$ 776.55 *14* keV		($\alpha = 0.00206$)	
$^{104}_{48}$Cd$_{56}$ 658.0 *2* keV		($\alpha = 0.00313$)	
0.41 *11*	8.8 *25*	Recoil Dist	1989VoZT
$^{106}_{48}$Cd$_{58}$ 632.64 *4* keV		($\alpha = 0.00347$)	
0.410 *20*	9.81 *48*	ADOPTED VALUE	
0.47 *5*	8.6 *10*	Coul Ex (x,x′γ)	1958St32
0.426 *17*	9.44 *38*	Coul Ex (x,x′γ)	1969Mi07
0.403 *29*	10.0 *7*	Coul Ex (x,x′γ)	1970Kl12
0.384 *5*	10.45 *14*	Coul Ex (x,x′)	1976Es02
$^{108}_{48}$Cd$_{60}$ 632.986 *16* keV		($\alpha = 0.00347$)	
0.430 *20*	9.33 *44*	ADOPTED VALUE	
0.54 *11*	7.8 *16*	Coul Ex (x,x′γ)	1958St32
0.442 *18*	9.07 *37*	Coul Ex (x,x′γ)	1969Mi07
0.406 *5*	9.86 *12*	Coul Ex (x,x′)	1976Es02
0.399 *32*	10.1 *8*	Recoil Dist	1994Th01
$^{110}_{48}$Cd$_{62}$ 657.7638 *1* keV		($\alpha = 0.00314$)	
0.450 *20*	7.36 *33*	ADOPTED VALUE	
0.41 *6*	8.2 *12*	Coul Ex (x,x′γ)	1956Te26
0.42 *8*	8.2 *16*	Coul Ex (x,x′)	1958Sh01
0.504 *40*	6.6 *5*	Coul Ex (x,x′γ)	1958St32
0.467 *19*	7.09 *29*	Coul Ex (x,x′γ)	1969Mi07
0.413 *22*	8.02 *43*	Coul Ex (x,x′γ)	1970St17
0.440 *40*	7.6 *7*	Coul Ex (x,x′γ)	1971Ha08
0.432 *6*	7.65 *11*	Coul Ex (x,x′)	1972Be66
0.426 *5*	7.76 *9*	Coul Ex (x,x′)	1976Es02

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.415 *6*	7.96 *12*	Coul Ex (x,x′γ)	1985Si01
0.361 *24*	9.2 *6*	Recoil Dist	1993Pi16
0.454 *43*	7.3 *7*	Electron Scatt	1977Gi13
0.447 *35*	7.4 *6*	Electron Scatt	1990We08
$^{112}_{48}$Cd$_{64}$ 617.520 *10* keV ($\alpha = 0.00370$)			
0.510 *20*	8.89 *35*	ADOPTED VALUE	
0.46 *7*	10.1 *15*	Coul Ex (x,x′γ)	1956Te26
0.42 *8*	11.2 *22*	Coul Ex (x,x′)	1958Sh01
0.542 *38*	8.4 *6*	Coul Ex (x,x′γ)	1958St32
0.546 *38*	8.3 *6*	Coul Ex (x,x′γ)	1962Ec03
0.524 *21*	8.65 *35*	Coul Ex (x,x′γ)	1969Mi07
0.452 *33*	10.1 *7*	Coul Ex (x,x′γ)	1970St17
0.520 *20*	8.72 *34*	Coul Ex (x,x′γ)	1971Ha47
0.547 *26*	8.30 *40*	Recoil Dist	1971NoZT
0.445 *17*	10.20 *40*	Doppler Shift	1972SiZP
0.486 *8*	9.32 *15*	Coul Ex (x,x′)	1973WeYO
0.483 *5*	9.38 *10*	Coul Ex (x,x′)	1976Es02
0.486 *5*	9.32 *10*	Coul Ex (x,x′γ)	1985Si01
0.52 *5*	8.7 *8*	Electron Scatt	1977Gi13
$^{114}_{48}$Cd$_{66}$ 558.456 *2* keV ($\alpha = 0.00487$)			
0.545 *20*	13.7 *5*	ADOPTED VALUE	
0.55 *8*	13.9 *21*	Coul Ex (x,x′γ)	1956Te26
0.52 *10*	14.9 *29*	Coul Ex (x,x′)	1958Sh01
0.584 *41*	12.9 *9*	Coul Ex (x,x′γ)	1958St32
0.523 *37*	14.4 *10*	Coul Ex (x,x′γ)	1962Ec03
0.572 *18*	13.08 *41*	Coul Ex (x,x′)	1967Gl02
0.48 *5*	15.8 *16*	Coul Ex (x,x′)	1967Si03
0.503 *13*	14.87 *39*	Coul Ex (x,x′)	1967St03
0.509 *9*	14.69 *26*	Coul Ex (x,x′)	1968Si05
0.576 *23*	13.0 *5*	Coul Ex (x,x′γ)	1969Mi07
0.560 *17*	13.36 *41*	Coul Ex (x,x′)	1969Sa27
0.502 *31*	14.9 *9*	Coul Ex (x,x′)	1970Kl12
0.553 *14*	13.53 *34*	Coul Ex (x,x′)	1970Pr07
0.547 *13*	13.68 *33*	Coul Ex (x,x′)	1970Wa04
0.512 *6*	14.61 *17*	Coul Ex (x,x′)	1972Be66
0.528 *5*	14.16 *14*	Coul Ex (x,x′)	1976Es02
0.574 *18*	13.04 *41*	Coul Ex (x,x′γ)	1985Si01
0.510 *30*	14.7 *9*	Coul Ex (x,x′γ)	1988Fa07
0.47 *5*	16.1 *17*	Electron Scatt	1973Ho05
0.553 *18*	13.53 *44*	Electron Scatt	1974Ye01
0.517 *49*	14.6 *14*	Electron Scatt	1976Gi07
0.575 *48*	13.1 *11*	Electron Scatt	1976Li19
$^{116}_{48}$Cd$_{68}$ 513.490 *15* keV ($\alpha = 0.00616$)			
0.560 *20*	20.3 *7*	ADOPTED VALUE	
0.62 *9*	18.8 *28*	Coul Ex (x,x′γ)	1956Te26
0.68 *14*	17.4 *35*	Coul Ex (x,x′)	1958Sh01
0.600 *42*	19.0 *13*	Coul Ex (x,x′γ)	1958St32
0.62 *5*	18.4 *15*	Coul Ex (x,x′)	1967St03

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.581 *23*	19.6 *8*	Coul Ex (x,x′)	1969Mi07
0.618 *35*	18.4 *10*	Coul Ex (x,x′γ)	1970St17
0.533 *8*	21.32 *32*	Coul Ex (x,x′)	1973WeYO
0.532 *5*	21.36 *21*	Coul Ex (x,x′)	1976Es02
0.608 *30*	18.7 *9*	Coul Ex (x,x′γ)	1985Si01
0.501 *47*	22.9 *22*	Electron Scatt	1977Gi13
$^{118}_{48}$Cd$_{70}$ 487.77 *8* keV ($\alpha = 0.00714$)			
0.568 *44*	26.0 *20*	Delayed Coinc	1989Ma33
$^{120}_{48}$Cd$_{72}$ 505.9 *2* keV ($\alpha = 0.00643$)			
0.48 *6*	26.0 *30*	Delayed Coinc	1989Ma33
$^{122}_{48}$Cd$_{74}$ 569.45 *8* keV ($\alpha = 0.00461$)			
0.58 *27*	15 *7*	Delayed Coinc	1995Za01
$^{124}_{48}$Cd$_{76}$ 613.33 *18* keV ($\alpha = 0.00377$)			
$^{126}_{48}$Cd$_{78}$ 652 *2* keV ($\alpha = 0.00321$)			
$^{102}_{50}$Sn$_{52}$ 1472.0 *20* keV			
$^{104}_{50}$Sn$_{54}$ 1260.1 *3* keV			
$^{106}_{50}$Sn$_{56}$ 1207.7 *5* keV			
$^{108}_{50}$Sn$_{58}$ 1206.07 *10* keV			
$^{110}_{50}$Sn$_{60}$ 1211.89 *15* keV			
$^{112}_{50}$Sn$_{62}$ 1256.85 *7* keV			
0.240 *14*	0.544 *32*	ADOPTED VALUE	
0.180 *40*	0.76 *17*	Coul Ex (x,x′γ)	1957Al43
0.33 *6*	0.41 *7*	Coul Ex (x,x′γ)	1961An07
0.256 *6*	0.508 *12*	Coul Ex (x,x′γ)	1970St20
0.229 *5*	0.568 *13*	Coul Ex (x,x′)	1975Gr30
$^{114}_{50}$Sn$_{64}$ 1299.92 *7* keV			
0.24 *5*	0.48 *10*	ADOPTED VALUE	
0.20 *7*	0.63 *22*	Coul Ex (x,x′γ)	1957Al43
0.25 *5*	0.46 *9*	Coul Ex (x,x′γ)	1961An07
0.27 *9*	0.45 *15*	Doppler Shift	1991ViZW
$^{116}_{50}$Sn$_{66}$ 1293.560 *8* keV			
0.209 *6*	0.539 *15*	ADOPTED VALUE	
0.19 *6*	0.66 *21*	Coul Ex (x,x′γ)	1957Al43
0.207 *27*	0.55 *7*	Coul Ex (x,x′γ)	1958St32
0.29 *6*	0.41 *8*	Coul Ex (x,x′γ)	1961An07
0.21 *9*	0.64 *27*	Reson Fluor	1962Ka28
0.165 *30*	0.71 *13*	Reson Fluor	1962Li10
0.25 *5*	0.48 *10*	Reson Fluor	1963Be14

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.223 *13*	0.507 *30*	Coul Ex (x,x′γ)	1970Kl06
0.216 *5*	0.521 *12*	Coul Ex (x,x′γ)	1970St20
0.195 *7*	0.578 *21*	Coul Ex (x,x′)	1975Gr30
0.215 *24*	0.53 *6*	Reson Fluor	1977Ca14
0.190 *19*	0.60 *6*	Reson Fluor	1994Go25
0.145 *21*	0.79 *12*	Electron Scatt	1967Ba52
0.183 *37*	0.64 *13*	Electron Scatt	1969Cu06
0.229 *15*	0.494 *32*	Electron Scatt	1976Li19

$^{118}_{50}$Sn$_{68}$ 1229.666 *16* keV

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.209 *8*	0.695 *27*	ADOPTED VALUE	
0.19 *5*	0.82 *22*	Coul Ex (x,x′γ)	1957Al43
0.278 *27*	0.53 *5*	Coul Ex (x,x′γ)	1958St32
0.240 *40*	0.62 *10*	Coul Ex (x,x′γ)	1961An07
0.230 *20*	0.64 *6*	Reson Fluor	1966Hr03
0.216 *5*	0.672 *16*	Coul Ex (x,x′γ)	1970St20
0.199 *6*	0.730 *22*	Coul Ex (x,x′)	1975Gr30
0.212 *22*	0.69 *7*	Reson Fluor	1977Ca14
0.172 *34*	0.88 *18*	Electron Scatt	1969Cu06
0.156 *6*	0.931 *36*	Electron Scatt	1991Pe07
0.198 *5*	0.733 *19*	Electron Scatt	1992Wi06

$^{120}_{50}$Sn$_{70}$ 1171.34 *19* keV

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.2020 *40*	0.916 *19*	ADOPTED VALUE	
0.170 *40*	1.15 *27*	Coul Ex (x,x′γ)	1957Al43
0.270 *22*	0.69 *6*	Coul Ex (x,x′γ)	1958St32
0.26 *5*	0.74 *14*	Coul Ex (x,x′γ)	1961An07
0.152 *29*	1.26 *24*	Reson Fluor	1966Hr03
0.2030 *40*	0.911 *19*	Coul Ex (x,x′γ)	1970St20
0.2079 *48*	0.890 *20*	Doppler Shift	1972SiZI
0.195 *13*	0.95 *6*	Doppler Shift	1972SiZP
0.1970 *40*	0.939 *20*	Coul Ex (x,x′)	1975Gr30
0.179 *16*	1.04 *9*	Reson Fluor	1977Ca14
0.179 *16*	1.04 *9*	Reson Fluor	1981Ca10
0.123 *21*	1.54 *26*	Electron Scatt	1967Ba52
0.173 *35*	1.11 *22*	Electron Scatt	1969Cu06

$^{122}_{50}$Sn$_{72}$ 1140.55 *3* keV

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.1920 *40*	1.101 *23*	ADOPTED VALUE	
0.150 *30*	1.47 *29*	Coul Ex (x,x′γ)	1957Al43
0.252 *30*	0.85 *10*	Coul Ex (x,x′γ)	1958St32
0.26 *5*	0.85 *16*	Coul Ex (x,x′γ)	1961An07
0.1960 *40*	1.078 *22*	Coul Ex (x,x′γ)	1970St20
0.1880 *40*	1.124 *24*	Coul Ex (x,x′)	1975Gr30

$^{124}_{50}$Sn$_{74}$ 1131.739 *17* keV

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.1660 *40*	1.324 *32*	ADOPTED VALUE	
0.140 *30*	1.66 *35*	Coul Ex (x,x′γ)	1957Al43
0.213 *24*	1.04 *12*	Coul Ex (x,x′γ)	1958St32
0.220 *40*	1.03 *19*	Coul Ex (x,x′γ)	1961An07
0.180 *20*	1.24 *14*	Coul Ex (x,x′γ)	1968La26
0.188 *13*	1.17 *8*	Coul Ex (x,x′γ)	1970Kl06
0.1610 *40*	1.365 *34*	Coul Ex (x,x′γ)	1970St20
0.1700 *40*	1.292 *31*	Coul Ex (x,x′)	1975Gr30
0.166 *22*	1.35 *18*	Reson Fluor	1994Go25
0.133 *22*	1.70 *29*	Electron Scatt	1967Ba52

$^{126}_{50}$Sn$_{76}$ 1141.15 *4* keV

$^{128}_{50}$Sn$_{78}$ 1168.83 *4* keV

$^{130}_{50}$Sn$_{80}$ 1221.26 *5* keV

$^{132}_{50}$Sn$_{82}$ 4041.1 *4* keV

$^{134}_{50}$Sn$_{84}$ 725 *2* keV ($\alpha = 0.00274$)

$^{108}_{52}$Te$_{56}$ 625.4 *10* keV ($\alpha = 0.00444$)

$^{110}_{52}$Te$_{58}$ 657.7 *2* keV ($\alpha = 0.00393$)

$^{112}_{52}$Te$_{60}$ 689.01 *20* keV ($\alpha = 0.00347$)

$^{114}_{52}$Te$_{62}$ 708.9 *2* keV ($\alpha = 0.00323$)

$^{116}_{52}$Te$_{64}$ 678.92 *3* keV ($\alpha = 0.00360$)

$^{118}_{52}$Te$_{66}$ 605.706 *20* keV ($\alpha = 0.00483$)

$^{120}_{52}$Te$_{68}$ 560.438 *20* keV ($\alpha = 0.00594$)

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.77 *16*	10.0 *21*	Coul Ex (x,x′γ)	1956Te26

$^{122}_{52}$Te$_{70}$ 564.117 *14* keV ($\alpha = 0.00584$)

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.660 *6*	10.76 *10*	ADOPTED VALUE	
0.47 *10*	15.8 *34*	Coul Ex (x,x′γ)	1956Te26
0.65 *6*	11.0 *10*	Coul Ex (x,x′γ)	1961St02
0.63 *16*	12.0 *30*	Reson Fluor	1963Sh17
0.57 *14*	13.2 *33*	Reson Fluor	1963Zi02
0.69 *11*	10.5 *16*	Reson Fluor	1964Pa17
0.610 *30*	11.7 *6*	Coul Ex (x,x′γ)	1970LaZM
0.666 *12*	10.67 *19*	Coul Ex (x,x′)	1974Ba45
0.658 *6*	10.79 *10*	Coul Ex (x,x′)	1976Bo12
0.664 *20*	10.71 *32*	Coul Ex (x,x′)	1977Sa04
0.6650 *30*	10.69 *5*	Coul Ex (x,x′)	1978Be10

$^{124}_{52}$Te$_{72}$ 602.731 *3* keV ($\alpha = 0.00489$)

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.568 *6*	8.99 *10*	ADOPTED VALUE	
0.39 *8*	13.7 *28*	Coul Ex (x,x′γ)	1956Te26
0.75 *10*	6.9 *9*	Reson Fluor	1961Ak02
0.61 *20*	9.4 *31*	Coul Ex (x,x′γ)	1962Ga13
0.83 *5*	6.20 *40*	Reson Fluor	1963Zi02
0.539 *28*	9.5 *5*	Reson Fluor	1968Sc13

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.470 *40*	10.9 *9*	Coul Ex (x,x′)	1970Ch14
0.710 *40*	7.21 *41*	Coul Ex (x,x′γ)	1970LaZM
0.569 *12*	8.98 *19*	Coul Ex (x,x′)	1974Ba45
0.567 *6*	9.01 *10*	Coul Ex (x,x′)	1975Kl07
0.561 *24*	9.12 *39*	Coul Ex (x,x′)	1977Sa04
$^{126}_{52}$Te$_{74}$ 666.338 *12* keV ($\alpha = 0.00378$)			
0.475 *10*	6.52 *14*	ADOPTED VALUE	
0.32 *6*	10.1 *20*	Coul Ex (x,x′γ)	1956Te26
0.532 *37*	5.85 *41*	Coul Ex (x,x′γ)	1958St32
0.487 *35*	6.39 *46*	Coul Ex (x,x′)	1967St16
0.420 *40*	7.4 *7*	Coul Ex (x,x′γ)	1968La26
0.510 *25*	6.08 *30*	Coul Ex (x,x′γ)	1970LaZM
0.479 *12*	6.46 *16*	Coul Ex (x,x′)	1974Ba45
0.466 *8*	6.64 *11*	Coul Ex (x,x′)	1975Kl07
0.457 *14*	6.78 *21*	Coul Ex (x,x′)	1977Sa04
$^{128}_{52}$Te$_{76}$ 743.30 *10* keV ($\alpha = 0.00288$)			
0.383 *6*	4.68 *8*	ADOPTED VALUE	
0.28 *6*	6.7 *13*	Coul Ex (x,x′γ)	1956Te26
0.412 *33*	4.38 *35*	Coul Ex (x,x′γ)	1958St32
0.390 *29*	4.62 *35*	Coul Ex (x,x′)	1967St16
0.390 *20*	4.61 *24*	Coul Ex (x,x′γ)	1970LaZM
0.387 *11*	4.64 *14*	Coul Ex (x,x′)	1974Ba45
0.378 *7*	4.75 *9*	Coul Ex (x,x′)	1975Kl07
0.380 *9*	4.72 *12*	Coul Ex (x,x′)	1977Sa04
0.3760 *30*	4.770 *41*	Coul Ex (x,x′)	1978Be10
$^{130}_{52}$Te$_{78}$ 839.494 *17* keV ($\alpha = 0.00215$)			
0.295 *7*	3.31 *8*	ADOPTED VALUE	
0.26 *5*	3.9 *8*	Coul Ex (x,x′γ)	1956Te26
0.340 *31*	2.90 *26*	Coul Ex (x,x′γ)	1958St32
0.300 *30*	3.29 *33*	Coul Ex (x,x′γ)	1970Ch01
0.302 *16*	3.24 *17*	Coul Ex (x,x′γ)	1970LaZM
0.290 *11*	3.37 *13*	Coul Ex (x,x′)	1974Ba45
0.295 *7*	3.31 *8*	Coul Ex (x,x′)	1976Bo12
$^{132}_{52}$Te$_{80}$ 973.90 *10* keV ($\alpha = 0.00153$)			
$^{134}_{52}$Te$_{82}$ 1279.04 *10* keV			
$^{136}_{52}$Te$_{84}$ 605.91 *10* keV ($\alpha = 0.00483$)			
$^{138}_{52}$Te$_{86}$ 443.1 *10* keV ($\alpha = 0.01151$)			
$^{112}_{54}$Xe$_{58}$ 466 *2* keV ($\alpha = 0.01092$)			
$^{114}_{54}$Xe$_{60}$ 449.7 *2* keV ($\alpha = 0.01210$)			
0.93 *6*	23.8 *16*	Recoil Dist	1998De29
$^{116}_{54}$Xe$_{62}$ 393.5 *10* keV ($\alpha = 0.0179$)			
1.21 *6*	35.1 *13*	Recoil Dist	1998De29
$^{118}_{54}$Xe$_{64}$ 337.32 *13* keV ($\alpha = 0.0287$)			
1.40 *7*	65.0 *30*	ADOPTED VALUE	
1.32 *10*	69 *5*	Recoil Dist	1977BeYM
1.40 *7*	65.0 *30*	Recoil Dist	1980KaZT
1.46 *14*	63 *6*	Delayed Coinc	1992MaZR
$^{120}_{54}$Xe$_{66}$ 322.4 *1* keV ($\alpha = 0.0331$)			
1.73 *11*	66.0 *40*	ADOPTED VALUE	
0.93 *11*	124 *15*	Recoil Dist	1972Ku14
0.94 *9*	122 *12*	Recoil Dist	1980KaZT
1.53 *15*	75 *7*	Recoil Dist	1990DeZN
1.78 *14*	64 *5*	Recoil Dist	1995Wa25
1.78 *11*	64.0 *40*	Delayed Coinc	1996Ma16
$^{122}_{54}$Xe$_{68}$ 331.18 *15* keV ($\alpha = 0.0304$)			
1.40 *6*	71.0 *30*	ADOPTED VALUE	
1.11 *10*	89 *8*	Recoil Dist	1972Ku14
1.92 *29*	53 *8*	Recoil Dist	1992Dr05
1.33 *9*	75 *5*	Recoil Dist	1993SaZT
1.421 *44*	70.0 *20*	Recoil Dist	1994Pe02
1.39 *8*	72.0 *40*	Recoil Dist	1998Go03
$^{124}_{54}$Xe$_{70}$ 354.14 *4* keV ($\alpha = 0.0247$)			
0.96 *6*	75 *5*	ADOPTED VALUE	
0.90 *7*	80 *6*	Coul Ex (x,x′γ)	1975Go18
1.20 *10*	60 *5*	Recoil Dist	1990DeZN
0.874 *43*	82.0 *40*	Recoil Dist	1998Go03
$^{126}_{54}$Xe$_{72}$ 388.634 *10* keV ($\alpha = 0.0186$)			
0.770 *25*	58.8 *19*	ADOPTED VALUE	
0.759 *26*	59.6 *20*	Delayed Coinc	1963De21
0.79 *6*	57.5 *44*	Coul Ex (x,x′γ)	1975Go18
0.762 *25*	59.4 *19*	Coul Ex (x,x′)	1977Ar19
$^{128}_{54}$Xe$_{74}$ 442.910 *9* keV ($\alpha = 0.01264$)			
0.750 *40*	31.6 *17*	ADOPTED VALUE	
0.69 *5*	34.5 *25*	Coul Ex (x,x′γ)	1975Go18
0.767 *32*	30.9 *13*	Coul Ex (x,x′)	1977Ar19
$^{130}_{54}$Xe$_{76}$ 536.085 *22* keV ($\alpha = 0.00740$)			
0.65 *5*	14.2 *11*	ADOPTED VALUE	
0.74 *17*	13.0 *30*	Reson Fluor	1970Ke15
0.81 *20*	12.0 *30*	Delayed Coinc	1974Bu13
0.92 *7*	9.2 *7*	Coul Ex (x,x′γ)	1975Go18
0.635 *48*	14.5 *11*	Coul Ex (x,x′)	1977Ar19
$^{132}_{54}$Xe$_{78}$ 667.720 *3* keV ($\alpha = 0.00417$)			
0.460 *30*	6.68 *44*	ADOPTED VALUE	
0.35 *11*	9.7 *30*	Reson Fluor	1961Ha36
0.440 *30*	6.99 *48*	Coul Ex (x,x′γ)	1975Go18

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.473 *29*	6.50 *40*	Coul Ex (x,x′)	1977Ar19
$^{134}_{54}$Xe$_{80}$ 847.041 *23* keV ($\alpha = 0.00235$)			
0.34 *6*	2.8 *5*	Coul Ex (x,x′)	1975EdZY
$^{136}_{54}$Xe$_{82}$ 1313.028 *10* keV			
0.36 *6*	0.30 *5*	ADOPTED VALUE	
0.18 *8*	0.72 *32*	Coul Ex (x,x′)	1975EdZY
0.36 *6*	0.30 *5*	Doppler Shift	1993Sp01
$^{138}_{54}$Xe$_{84}$ 588.825 *18* keV ($\alpha = 0.00550$)			
$^{140}_{54}$Xe$_{86}$ 376.658 *15* keV ($\alpha = 0.0204$)			
0.324 *14*	163 *7*	Delayed Coinc	1980ChZM
$^{142}_{54}$Xe$_{88}$ 287.1 *2* keV ($\alpha = 0.0479$)			
$^{144}_{54}$Xe$_{90}$ 252.6 *10* keV ($\alpha = 0.0728$)			
$^{118}_{56}$Ba$_{62}$ 194 *2* keV ($\alpha \sim 0.189$)			
$^{120}_{56}$Ba$_{64}$ 183.0 *5* keV ($\alpha = 0.231$)			
$^{122}_{56}$Ba$_{66}$ 196.1 *3* keV ($\alpha = 0.182$)			
2.81 *28*	428 *39*	Delayed Coinc	1992Mo13
$^{124}_{56}$Ba$_{68}$ 229.89 *10* keV ($\alpha = 0.1070$)			
2.09 *10*	275 *12*	ADOPTED VALUE	
2.36 *18*	245 *18*	Recoil Dist	1992De60
1.35 *12*	428 *38*	Delayed Coinc	1992Mo13
2.009 *48*	286 *6*	Recoil Dist	1993SaZT
2.09 *10*	275 *12*	Recoil Dist	1998Uc01
$^{126}_{56}$Ba$_{70}$ 256.09 *7* keV ($\alpha = 0.0749$)			
1.75 *9*	198 *10*	ADOPTED VALUE	
1.32 *25*	270 *50*	Recoil Dist	1967Cl02
2.05 *34*	173 *28*	Recoil Dist	1972Ku14
1.85 *20*	188 *20*	Recoil Dist	1979Se03
2.04 *16*	170 *13*	Recoil Dist	1989Sc06
1.71 *17*	203 *20*	Delayed Coinc	1992Mo13
1.69 *5*	204 *6*	Recoil Dist	1996De50
$^{128}_{56}$Ba$_{72}$ 284.09 *8* keV ($\alpha = 0.0535$)			
1.48 *7*	142 *6*	ADOPTED VALUE	
1.57 *34*	140 *30*	Recoil Dist	1972Ku14
1.48 *7*	142 *6*	Recoil Dist	1992Pe06
$^{130}_{56}$Ba$_{74}$ 357.38 *8* keV ($\alpha = 0.0261$)			
1.163 *16*	58.7 *9*	ADOPTED VALUE	
0.75 *18*	97 *24*	Coul Ex (x,x′γ)	1958Fa01
1.36 *14*	51 *5*	Coul Ex (x,x′γ)	1967Si03
1.21 *38*	63 *20*	Coul Ex (x,x′)	1973ToXW
1.23 *11*	56 *5*	Recoil Dist	1985VoZY
1.163 *16*	58.7 *9*	Coul Ex (x,x′)	1989Bu07
1.100 *24*	62.0 *14*	Recoil Dist	1998StZX
$^{132}_{56}$Ba$_{76}$ 464.588 *24* keV ($\alpha = 0.01206$)			
0.86 *6*	21.8 *15*	ADOPTED VALUE	
0.73 *18*	27 *7*	Coul Ex (x,x′γ)	1958Fa01
0.86 *6*	21.8 *15*	Coul Ex (x,x′)	1985Bu01
$^{134}_{56}$Ba$_{78}$ 604.7230 *19* keV ($\alpha = 0.00593$)			
0.658 *7*	7.62 *8*	ADOPTED VALUE	
0.75 *25*	7.5 *25*	Coul Ex (x,x′γ)	1963Al31
0.672 *16*	7.47 *18*	Coul Ex (x,x′)	1972Ke16
0.50 *7*	10.2 *14*	Coul Ex (x,x′)	1973ToXW
0.700 *15*	7.17 *15*	Coul Ex (x,x′)	1977Kl05
0.671 *18*	7.48 *20*	Coul Ex (x,x′)	1985Bu01
0.655 *6*	7.66 *7*	Coul Ex (x,x′)	1989Bu07
$^{136}_{56}$Ba$_{80}$ 818.515 *12* keV ($\alpha = 0.00283$)			
0.410 *8*	2.70 *5*	ADOPTED VALUE	
0.53 *16*	2.3 *7*	Coul Ex (x,x′γ)	1963Al31
0.418 *11*	2.65 *7*	Coul Ex (x,x′)	1972Ke16
0.36 *5*	3.14 *44*	Doppler Shift	1973Fi15
0.3990 *30*	2.778 *21*	Coul Ex (x,x′)	1984Be20
0.418 *5*	2.650 *32*	Coul Ex (x,x′)	1986Ro15
$^{138}_{56}$Ba$_{82}$ 1435.818 *10* keV			
0.230 *9*	0.291 *11*	ADOPTED VALUE	
0.38 *11*	0.19 *6*	Coul Ex (x,x′γ)	1961An07
0.27 *9*	0.28 *9*	Coul Ex (x,x′γ)	1963Al31
0.221 *9*	0.303 *12*	Coul Ex (x,x′)	1972Ke16
0.238 *17*	0.282 *21*	Reson Fluor	1977Sw03
0.2170 *30*	0.3080 *43*	Coul Ex (x,x′)	1978Ki09
0.236 *11*	0.284 *13*	Coul Ex (x,x′)	1985Bu01
0.241 *6*	0.278 *9*	Coul Ex (x,x′)	1989Bu07
0.25 *10*	0.33 *14*	Doppler Shift	1993Be03
0.249 *13*	0.269 *14*	Electron Scatt	1972LeYB
$^{140}_{56}$Ba$_{84}$ 602.35 *3* keV ($\alpha = 0.00599$)			
0.45 *19*	14 *6*	Delayed Coinc	1989Ma38
$^{142}_{56}$Ba$_{86}$ 359.597 *14* keV ($\alpha = 0.0256$)			
0.699 *37*	95 *5*	ADOPTED VALUE	
0.97 *49*	100 *60*	Delayed Coinc	1975JaYL
0.584 *45*	114 *9*	Delayed Coinc	1980ChZM
0.77 *6*	86 *6*	Recoil Dist	1986Ma22
0.699 *37*	95 *5*	Delayed Coinc	1989Ma38
0.697 *22*	95.0 *30*	Delayed Coinc	1989Mo06
$^{144}_{56}$Ba$_{88}$ 199.326 *5* keV ($\alpha = 0.173$)			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
1.05 *6*	1060 *60*	ADOPTED VALUE	
0.80 *16*	1440 *290*	Delayed Coinc	1970Wa05
1.097 *49*	1010 *43*	Delayed Coinc	1975JaYL
0.93 *17*	1230 *220*	Delayed Coinc	1976MoZB
1.11 *11*	1010 *100*	Delayed Coinc	1980ChZM
0.90 *36*	1500 *600*	Recoil Dist	1986Ma22
1.081 *44*	1025 *40*	Delayed Coinc	1989Ma38
$^{146}_{56}$Ba$_{90}$ 181.05 *5* keV ($\alpha = 0.240$)			
1.355 *48*	1250 *40*	ADOPTED VALUE	
1.37 *10*	1240 *90*	Delayed Coinc	1975JaYL
1.30 *17*	1330 *170*	Delayed Coinc	1980ChZM
1.37 *5*	1240 *42*	Delayed Coinc	1989Ma38
$^{148}_{56}$Ba$_{92}$ 141.7 *10* keV ($\alpha = 0.558$)			
$^{124}_{58}$Ce$_{66}$ 142.0 *10* keV ($\alpha = 0.589$)			
3.7 *9*	1270 *280*	Recoil Dist	1995Ma96
$^{126}_{58}$Ce$_{68}$ 169.59 *3* keV ($\alpha = 0.319$)			
2.68 *48*	850 *150*	ADOPTED VALUE	
2.33 *14*	950 *50*	Recoil Dist	1988Mo08
4.1 *8*	560 *110*	Recoil Dist	1995Ma96
$^{128}_{58}$Ce$_{70}$ 207.3 *10* keV ($\alpha = 0.162$)			
2.28 *22*	405 *30*	ADOPTED VALUE	
2.16 *23*	429 *36*	Recoil Dist	1984We17
2.40 *25*	385 *31*	Recoil Dist	1988Mo08
$^{130}_{58}$Ce$_{72}$ 253.99 *19* keV ($\alpha = 0.0826$)			
1.74 *10*	206 *11*	ADOPTED VALUE	
1.60 *15*	225 *20*	Recoil Dist	1974De12
1.69 *8*	211 *9*	Recoil Dist	1975Bu08
1.72 *13*	209 *15*	Recoil Dist	1977Hu10
2.00 *17*	180 *15*	Recoil Dist	1984To10
$^{132}_{58}$Ce$_{74}$ 325.54 *16* keV ($\alpha = 0.0375$)			
1.87 *17*	58 *5*	ADOPTED VALUE	
1.62 *23*	68 *10*	Recoil Dist	1974De12
1.90 *14*	57.0 *40*	Recoil Dist	1977Hu10
1.90 *30*	58 *9*	Recoil Dist	1989Ki01
$^{134}_{58}$Ce$_{76}$ 409.12 *10* keV ($\alpha = 0.0189$)			
1.04 *9*	34.0 *30*	ADOPTED VALUE	
1.04 *24*	36 *8*	Recoil Dist	1974De12
1.08 *9*	32.7 *28*	Recoil Dist	1977Hu10
$^{136}_{58}$Ce$_{78}$ 552.20 *11* keV ($\alpha = 0.00825$)			
0.81 *9*	9.8 *11*	Coul Ex (x,x′γ)	1989GaZP
$^{138}_{58}$Ce$_{80}$ 788.744 *8* keV ($\alpha = 0.00342$)			
0.450 *30*	2.97 *20*	ADOPTED VALUE	
0.450 *30*	2.97 *20*	Coul Ex (x,x′γ)	1989Lo01
0.46 *5*	2.92 *32*	Coul Ex (x,x′γ)	1989GaZP
$^{140}_{58}$Ce$_{82}$ 1596.227 *25* keV			
0.298 *6*	0.1321 *27*	ADOPTED VALUE	
0.36 *5*	0.110 *15*	Reson Fluor	1959Of14
0.27 *5*	0.151 *28*	Coul Ex (x,x′γ)	1961An07
0.27 *5*	0.151 *28*	Coul Ex (x,x′γ)	1966Ec02
0.2950 *40*	0.1334 *18*	Coul Ex (x,x′)	1978Ki09
0.305 *9*	0.1290 *40*	Doppler Shift	1991Ba38
0.38 *11*	0.115 *35*	Doppler Shift	1993Be03
0.280 *37*	0.143 *19*	Electron Scatt	1973Pi04
$^{142}_{58}$Ce$_{84}$ 641.286 *9* keV ($\alpha = 0.00562$)			
0.480 *6*	7.80 *10*	ADOPTED VALUE	
0.41 *8*	9.5 *19*	Coul Ex (x,x′γ)	1961An07
0.42 *5*	9.0 *11*	Coul Ex (x,x′γ)	1966Ec02
0.459 *6*	8.15 *11*	Coul Ex (x,x′)	1970En01
0.480 *6*	7.80 *10*	Coul Ex (x,x′)	1988Ve08
0.36 *18*	14 *7*	Delayed Coinc	1989Mo06
0.480 *6*	7.80 *10*	Coul Ex (x,x′)	1989Sp07
0.461 *46*	8.2 *8*	Doppler Shift	1995Va25
0.89 *49*	6.0 *33*	Electron Scatt	1973Pi04
$^{144}_{58}$Ce$_{86}$ 397.441 *9* keV ($\alpha = 0.0206$)			
0.83 *9*	49 *5*	Delayed Coinc	1989Mo06
$^{146}_{58}$Ce$_{88}$ 258.46 *3* keV ($\alpha = 0.0780$)			
1.14 *12*	290 *30*	ADOPTED VALUE	
0.91 *18*	380 *70*	Delayed Coinc	1975JaYL
0.96 *12*	346 *43*	Delayed Coinc	1980ChZM
1.21 *7*	273 *15*	Delayed Coinc	1989Ma38
$^{148}_{58}$Ce$_{90}$ 158.468 *5* keV ($\alpha = 0.403$)			
1.96 *18*	1500 *130*	ADOPTED VALUE	
1.59 *25*	1880 *290*	Delayed Coinc	1970Wa05
1.91 *15*	1530 *120*	Delayed Coinc	1975JaYL
2.14 *19*	1370 *120*	Delayed Coinc	1980ChZM
$^{150}_{58}$Ce$_{92}$ 97.1 *10* keV ($\alpha \sim 2.25$)			
3.3 *8*	4700 *1000*	ADOPTED VALUE	
3.1 *9*	5200 *1400*	Delayed Coinc	1975JaYL
3.4 *7*	4400 *800*	Delayed Coinc	1980ChZM
$^{152}_{58}$Ce$_{94}$ 81.7 *10* keV ($\alpha \sim 4.19$)			
$^{128}_{60}$Nd$_{68}$ 133.66 *7* keV ($\alpha = 0.773$)			
$^{130}_{60}$Nd$_{70}$ 158 *2* keV ($\alpha \sim 0.433$)			
4.1 *18*	860 *350*	Recoil Dist	1989Mo10

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{132}_{60}$Nd$_{72}$ 212.62 *18* keV ($\alpha = 0.158$)			
3.5 *6*	240 *40*	ADOPTED VALUE	
2.58 *25*	317 *29*	Recoil Dist	1986Ma39
2.33 *21*	350 *30*	Recoil Dist	1987Wa02
3.06 *23*	266 *19*	Recoil Dist	1989Mo10
4.24 *26*	192 *11*	Recoil Dist	1995Ma96
$^{134}_{60}$Nd$_{74}$ 294.30 *16* keV ($\alpha = 0.00553$)			
1.83 *37*	100 *20*	ADOPTED VALUE	
1.91 *13*	92 *6*	Recoil Dist	1987Bi13
1.18 *10*	150 *12*	Recoil Dist	1987Wa02
2.23 *29*	80 *10*	Recoil Dist	1995Ma96
$^{136}_{60}$Nd$_{76}$ 373.6 *3* keV ($\alpha = 0.0267$)			
$^{138}_{60}$Nd$_{78}$ 520.1 *3* keV ($\alpha = 0.01057$)			
$^{140}_{60}$Nd$_{80}$ 773.73 *6* keV ($\alpha = 0.00396$)			
$^{142}_{60}$Nd$_{82}$ 1575.83 *15* keV			
0.265 *6*	0.1584 *37*	ADOPTED VALUE	
0.42 *7*	0.103 *17*	Coul Ex (x,x′γ)	1966Ec02
0.57 *17*	0.081 *24*	Coul Ex (x,x′γ)	1967BuZX
0.270 *30*	0.157 *18*	Coul Ex (x,x′)	1973Ch13
0.2650 *40*	0.1584 *25*	Coul Ex (x,x′)	1978Ki09
0.256 *19*	0.165 *12*	Reson Fluor	1978Me16
0.264 *7*	0.1590 *40*	Doppler Shift	1991Ba38
0.33 *9*	0.140 *40*	Doppler Shift	1993Be03
0.289 *8*	0.1453 *41*	Electron Scatt	1971Ma27
0.437 *37*	0.097 *8*	Electron Scatt	1974MaYP
$^{144}_{60}$Nd$_{84}$ 696.513 *5* keV ($\alpha = 0.00506$)			
0.491 *5*	5.04 *5*	ADOPTED VALUE	
0.23 *5*	11.3 *25*	Coul Ex (x,x′γ)	1960Le07
0.44 *5*	5.7 *6*	Coul Ex (x,x′γ)	1966Ec02
0.48 *8*	5.3 *9*	Coul Ex (x,x′γ)	1967BuZX
0.510 *16*	4.86 *15*	Coul Ex (x,x′)	1971Cr01
0.56 *6*	4.47 *48*	Coul Ex (x,x′γ)	1980FaZW
0.580 *10*	4.27 *7*	Coul Ex (x,x′)	1988Ah01
0.491 *5*	5.04 *5*	Coul Ex (x,x′)	1989Sp07
0.460 *40*	5.43 *47*	Electron Scatt	1993Pe10
$^{146}_{60}$Nd$_{86}$ 453.77 *5* keV ($\alpha = 0.0152$)			
0.760 *25*	27.5 *9*	ADOPTED VALUE	
0.85 *25*	27 *8*	Coul Ex (x,x′γ)	1955He64
0.65 *7*	32.5 *35*	Coul Ex (x,x′γ)	1966Ec02
0.68 *10*	31.4 *46*	Coul Ex (x,x′γ)	1967BuZX
0.71 *6*	29.6 *25*	Coul Ex (x,x′)	1970Ch14
0.760 *22*	27.5 *8*	Coul Ex (x,x′)	1971Cr01
0.81 *7*	26.0 *23*	Coul Ex (x,x′γ)	1980FaZW
0.780 *10*	26.79 *36*	Coul Ex (x,x′)	1988Ah01
0.66 *14*	33 *7*	Delayed Coinc	1989Mo06
0.705 *34*	29.7 *15*	Electron Scatt	1971Ma27
0.616 *28*	34.0 *16*	Electron Scatt	1974MaYP
$^{148}_{60}$Nd$_{88}$ 301.702 *16* keV ($\alpha = 0.0511$)			
1.35 *5*	115.2 *44*	ADOPTED VALUE	
1.58 *47*	108 *33*	Coul Ex (x,x′γ)	1955He64
0.60 *20*	290 *100*	Coul Ex (x,x′γ)	1955Si12
0.96 *10*	164 *17*	Coul Ex (x,x′γ)	1966Ec02
1.05 *16*	151 *23*	Coul Ex (x,x′γ)	1967BuZX
1.360 *30*	114.3 *26*	Coul Ex (x,x′)	1971Cr01
1.42 *5*	109.5 *39*	Coul Ex (x,x′γ)	1980FaZW
1.390 *20*	111.8 *17*	Coul Ex (x,x′)	1988Ah01
1.352 *48*	115.0 *40*	Recoil Dist	1991Ib01
1.30 *6*	120 *6*	Coul Ex (x,x′γ)	1997Ib01
$^{150}_{60}$Nd$_{90}$ 130.21 *8* keV ($\alpha = 0.847$)			
2.760 *40*	2139 *45*	ADOPTED VALUE	
2.73 *9*	2160 *60*	Pulsed Beam	1959Bi10
2.67 *10*	2210 *100*	Coul Ex (x,x′)	1963Bj04
2.69 *6*	2191 *34*	Pulsed Beam	1967Ku07
2.77 *9*	2140 *60*	Pulsed Beam	1968Ri09
2.72 *6*	2170 *60*	Coul Ex (x,x′)	1969KeZX
2.75 *8*	2150 *80*	Coul Ex (x,x′γ)	1973FrZN
2.720 *40*	2171 *46*	Coul Ex (x,x′)	1977Wo02
2.85 *16*	2080 *100*	Recoil Dist	1978Ya02
2.816 *35*	2097 *40*	Coul Ex (x,x′)	1988Ah01
2.820 *40*	2094 *44*	Coul Ex (x,x′)	1993Sa06
2.64 *8*	2240 *80*	Muonic X-ray	1970Hi03
1.49 *10*	3980 *290*	Electron Scatt	1971Ma27
1.49 *13*	3990 *370*	Electron Scatt	1974MaYP
$^{152}_{60}$Nd$_{92}$ 72.51 *19* keV ($\alpha = 7.02$)			
4.20 *28*	6060 *330*	ADOPTED VALUE	
3.97 *28*	6420 *370*	Delayed Coinc	1991He03
4.42 *30*	5760 *320*	Delayed Coinc	1999To04
$^{154}_{60}$Nd$_{94}$ 70.8 *1* keV ($\alpha = 7.68$)			
$^{156}_{60}$Nd$_{96}$ 66.9 *10* keV ($\alpha \sim 9.52$)			
$^{130}_{62}$Sm$_{68}$ 122 *3* keV ($\alpha \sim 1.134$)			
$^{132}_{62}$Sm$_{70}$ 131 *2* keV ($\alpha \sim 0.882$)			
$^{134}_{62}$Sm$_{72}$ 163 *2* keV ($\alpha \sim 0.413$)			
4.2 *6*	600 *50*	Recoil Dist	1987Wa02
$^{136}_{62}$Sm$_{74}$ 254.91 *16* keV ($\alpha = 0.0934$)			
2.73 *27*	128 *12*	ADOPTED VALUE	
1.86 *15*	187 *14*	Recoil Dist	1986Ma39

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
1.84 *15*	190 *15*	Recoil Dist	1987Wa02
2.73 *27*	128 *12*	Recoil Dist	1988So06
$^{138}_{62}\mathrm{Sm}_{76}$ 346.9 *3* keV ($\alpha = 0.0359$)			
1.41 *23*	57 *9*	ADOPTED VALUE	
1.73 *37*	48 *10*	Recoil Dist	1985Lu06
1.23 *17*	65 *9*	Recoil Dist	1986Ma39
$^{140}_{62}\mathrm{Sm}_{78}$ 530.7 *1* keV ($\alpha = 0.01093$)			
$^{142}_{62}\mathrm{Sm}_{80}$ 768.0 *2* keV ($\alpha = 0.00444$)			
$^{144}_{62}\mathrm{Sm}_{82}$ 1660.2 *4* keV			
0.262 *6*	0.1235 *30*	ADOPTED VALUE	
0.39 *12*	0.092 *28*	Coul Ex (x,x′γ)	1963Al31
0.25 *5*	0.135 *27*	Coul Ex (x,x′γ)	1966Ec02
0.262 *6*	0.1235 *30*	Coul Ex (x,x′)	1978Ki09
0.27 *6*	0.129 *30*	Reson Fluor	1978Me08
0.261 *11*	0.124 *5*	Doppler Shift	1991Ba38
$^{146}_{62}\mathrm{Sm}_{84}$ 747.115 *13* keV ($\alpha = 0.00473$)			
$^{148}_{62}\mathrm{Sm}_{86}$ 550.265 *23* keV ($\alpha = 0.00996$)			
0.720 *30*	11.14 *47*	ADOPTED VALUE	
0.89 *10*	9.1 *10*	Coul Ex (x,x′)	1960El07
0.70 *8*	11.6 *13*	Coul Ex (x,x′γ)	1966Ec02
0.79 *8*	10.2 *10*	Coul Ex (x,x′)	1967Si03
0.63 *5*	12.8 *10*	Coul Ex (x,x′γ)	1968Ke04
0.65 *5*	12.4 *10*	Coul Ex (x,x′)	1968Ve01
0.705 *25*	11.38 *41*	Coul Ex (x,x′)	1970Ge07
0.760 *42*	10.6 *6*	Recoil Dist	1971Di02
0.725 *25*	11.06 *38*	Coul Ex (x,x′γ)	1973ClZF
0.811 *37*	9.90 *45*	Electron Scatt	1972LeYB
$^{150}_{62}\mathrm{Sm}_{88}$ 333.863 *9* keV ($\alpha = 0.0403$)			
1.350 *30*	70.1 *16*	ADOPTED VALUE	
1.32 *6*	71.8 *33*	Coul Ex (x,x′)	1960El07
1.37 *15*	70 *8*	Coul Ex (x,x′γ)	1966Ec02
1.31 *21*	74 *12*	Coul Ex (x,x′γ)	1966Se06
1.44 *15*	66 *7*	Coul Ex (x,x′)	1967Si03
1.22 *8*	78 *5*	Coul Ex (x,x′γ)	1968Ke04
1.29 *7*	73.5 *40*	Coul Ex (x,x′)	1968Ve01
1.330 *30*	71.2 *16*	Coul Ex (x,x′)	1971Ca35
1.365 *49*	69.4 *25*	Recoil Dist	1971Di02
1.43 *5*	66.2 *24*	Coul Ex (x,x′γ)	1973ClZF
1.36 *10*	70 *5*	Coul Ex (x,x′γ)	1977Ho10
1.47 *9*	65.5 *40*	Muonic X-ray	1978Ya11
1.32 *8*	71.9 *44*	Electron Scatt	1972LeYB
$^{152}_{62}\mathrm{Sm}_{90}$ 121.7817 *3* keV ($\alpha = 1.141$)			
3.46 *6*	2060 *25*	ADOPTED VALUE	
3.3 *10*	2300 *700*	Coul Ex (x,x′γ)	1955He64
3.54 *27*	2020 *140*	Delayed Coinc	1955Su64
3.3 *8*	2300 *600*	Coul Ex Ce(L)	1956Hu49
3.20 *36*	2250 *260*	Coul Ex (x,x′)	1958Sh01
3.41 *15*	2090 *80*	Pulsed Beam	1959Bi10
3.40 *15*	2100 *100*	Coul Ex (x,x′)	1960El07
3.53 *10*	2020 *70*	Coul Ex (x,x′)	1961Be43
3.39 *36*	2120 *220*	Pulsed Beam	1961Sa21
3.47 *12*	2050 *60*	Delayed Coinc	1962Ba38
3.60 *12*	1980 *60*	Delayed Coinc	1963Fo02
3.67 *25*	1950 *140*	Coul Ex Ce(K)	1963Gr04
3.40 *20*	2100 *130*	Coul Ex (x,x′γ)	1964Ho25
3.45 *12*	2060 *60*	Delayed Coinc	1965Hu02
3.49 *16*	2040 *80*	Recoil Dist	1966As03
3.63 *18*	1960 *90*	Delayed Coinc	1966Mc07
3.45 *12*	2060 *60*	Delayed Coinc	1967Ba27
3.36 *13*	2120 *70*	Pulsed Beam	1967Wo06
3.50 *12*	2030 *60*	Delayed Coinc	1968Ku03
3.43 *9*	2077 *43*	Delayed Coinc	1968Ri09
3.1 *5*	2360 *390*	Coul Ex (x,x′)	1968Ve01
3.310 *40*	2150 *37*	Coul Ex (x,x′γ)	1970KaZK
3.45 *28*	2080 *180*	Coul Ex (x,x′γ)	1970Sa09
3.66 *15*	1950 *70*	Delayed Coinc	1972El20
3.390 *30*	2099 *30*	Coul Ex (x,x′)	1972Sa42
3.46 *11*	2060 *80*	Coul Ex (x,x′)	1973Br02
3.46 *5*	2057 *41*	Coul Ex (x,x′)	1974Sh12
3.47 *7*	2050 *50*	Coul Ex (x,x′)	1974Wo01
3.430 *40*	2075 *35*	Coul Ex (x,x′)	1977Fi01
3.60 *15*	1980 *70*	Delayed Coinc	1981Is04
3.534 *36*	2014 *10*	Delayed Coinc	1988Ka21
3.31 *19*	2160 *110*	Delayed Coinc	1991He03
3.52 *7*	2020 *29*	Delayed Coinc	1992De29
3.32 *8*	2140 *60*	Muonic X-ray	1970Hi03
3.28 *7*	2170 *60*	Muonic X-ray	1975Ba72
3.457 *9*	2059 *16*	Muonic X-ray	1978Ya11
3.35 *20*	2130 *140*	Electron Scatt	1972LeYB
3.45 *6*	2063 *47*	Electron Scatt	1977Na01
$^{154}_{62}\mathrm{Sm}_{92}$ 81.976 *18* keV ($\alpha = 4.80$)			
4.36 *5*	4360 *90*	ADOPTED VALUE	
4.7 *14*	4400 *1400*	Coul Ex (x,x′γ)	1955He64
6.8 *17*	3000 *800*	Coul Ex Ce(L)	1956Hu49
3.45 *40*	5600 *700*	Coul Ex (x,x′)	1958Sh01
4.96 *45*	3860 *320*	Delayed Coinc	1959Bi10
4.61 *20*	4130 *210*	Coul Ex (x,x′)	1960El07
3.5 *5*	5600 *900*	Coul Ex (x,x′γ)	1961Go09
4.53 *35*	4220 *360*	Coul Ex Ce(L)	1963Gr04
4.38 *30*	4360 *340*	Coul Ex Ce(L)	1963Gr04
5.10 *40*	3750 *330*	Coul Ex (x,x′γ)	1964Ho25
4.35 *11*	4370 *70*	Pulsed Beam	1967Wo06
4.39 *13*	4330 *90*	Delayed Coinc	1968Ri09
4.2 *6*	4600 *700*	Coul Ex (x,x′)	1968Ve01
4.46 *8*	4260 *110*	Coul Ex (x,x′)	1972BrYV

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
4.30 7	4420 110	Coul Ex (x,x′)	1972Sa42
4.26 7	4460 110	Coul Ex (x,x′)	1973Be40
4.39 9	4330 130	Coul Ex (x,x′)	1974Br31
4.37 7	4350 110	Coul Ex (x,x′)	1974Sh12
4.290 40	4430 80	Coul Ex (x,x′)	1974Wo01
4.49 5	4230 80	Coul Ex (x,x′)	1977Fi01
4.45 39	4300 410	Electron Scatt	1977HoZF
$^{156}_{62}$Sm$_{94}$ 75.89 5 keV ($\alpha = 6.42$)			
$^{158}_{62}$Sm$_{96}$ 72.8 10 keV ($\alpha \sim 7.52$)			
$^{160}_{62}$Sm$_{98}$ 70.6 10 keV ($\alpha \sim 8.46$)			
$^{138}_{64}$Gd$_{74}$ 220.90 18 keV ($\alpha = 0.158$)			
$^{140}_{64}$Gd$_{76}$ 328.6 10 keV ($\alpha = 0.0454$)			
$^{142}_{64}$Gd$_{78}$ 515.3 1 keV			
$^{144}_{64}$Gd$_{80}$ 743.0 10 keV ($\alpha = 0.00527$)			
$^{146}_{64}$Gd$_{82}$ 1971.97 22 keV			
$^{148}_{64}$Gd$_{84}$ 784.430 16 keV ($\alpha = 0.00466$)			
$^{150}_{64}$Gd$_{86}$ 638.045 14 keV ($\alpha = 0.00753$)			
$^{152}_{64}$Gd$_{88}$ 344.2789 12 keV ($\alpha = 0.0395$)			
1.67 14	49.0 40	ADOPTED VALUE	
1.10 19	76 13	Delayed Coinc	1961Bu17
2.3 8	40 14	Delayed Coinc	1967Ab06
1.97 13	41.4 27	Coul Ex (x,x′)	1970Be36
1.58 30	53 10	Delayed Coinc	1974El03
1.65 7	49.3 22	Recoil Dist	1982Jo04
1.59 21	52 7	Delayed Coinc	1993Se08
$^{154}_{64}$Gd$_{90}$ 123.0714 10 keV ($\alpha = 1.173$)			
3.89 7	1710 20	ADOPTED VALUE	
5.1 15	1440 440	Coul Ex (x,x′γ)	1955He64
3.87 34	1730 140	Delayed Coinc	1955Su64
3.48 40	1940 230	Coul Ex (x,x′)	1958Ra12
3.86 27	1730 110	Delayed Coinc	1959Bi10
3.43 30	1950 180	Coul Ex (x,x′)	1960El07
4.01 13	1659 43	Delayed Coinc	1961Na06
3.92 14	1700 50	Delayed Coinc	1961St04
3.99 19	1670 70	Delayed Coinc	1963Bu03
3.91 12	1702 43	Delayed Coinc	1963Fo02
3.81 15	1750 60	Delayed Coinc	1968Ku03
3.91 15	1700 60	Delayed Coinc	1972Aw04
3.91 19	1700 70	Delayed Coinc	1973GrXX
3.85 8	1728 45	Coul Ex (x,x′)	1977Ro08
3.90 6	1706 36	Coul Ex (x,x′)	1977Sc33
3.83 5	1737 32	Coul Ex (x,x′)	1977Wo02
3.895 37	1708 7	Delayed Coinc	1995Ma03
3.81 15	1750 80	Muonic X-ray	1983La08
$^{156}_{64}$Gd$_{92}$ 88.9666 14 keV ($\alpha = 3.83$)			
4.64 5	3270 60	ADOPTED VALUE	
9.3 29	1800 600	Coul Ex (x,x′γ)	1955He64
7.7 19	2100 500	Coul Ex Ce(L)	1956Hu49
5.54 34	2740 140	Delayed Coinc	1958Na01
4.50 25	3380 210	Coul Ex (x,x′)	1958Ra12
4.80 19	3160 100	Delayed Coinc	1959Be57
5.31 27	2860 120	Delayed Coinc	1959Bi10
4.57 25	3330 210	Coul Ex (x,x′)	1960El07
3.6 5	4300 700	Coul Ex (x,x′γ)	1961Go09
4.74 16	3200 80	Delayed Coinc	1962Ba38
4.87 17	3120 90	Delayed Coinc	1963Fo02
4.84 15	3130 70	Delayed Coinc	1965Me08
4.74 21	3200 120	Delayed Coinc	1966Mc07
4.61 15	3290 80	Pulsed Beam	1967Wo06
4.76 17	3190 90	Delayed Coinc	1968Ku03
4.63 5	3270 60	Coul Ex (x,x′)	1977Fi01
4.57 5	3320 60	Coul Ex (x,x′)	1977Ro08
4.59 9	3300 90	Coul Ex (x,x′)	1977Wo02
4.58 18	3310 160	Muonic X-ray	1983La08
4.5 5	3430 430	Electron Scatt	1985Bo31
$^{158}_{64}$Gd$_{94}$ 79.510 2 keV ($\alpha = 5.86$)			
5.02 5	3730 70	ADOPTED VALUE	
12.2 37	1700 500	Coul Ex (x,x′γ)	1955He64
5.36 25	3500 190	Coul Ex (x,x′)	1958Ra12
4.78 42	3940 310	Delayed Coinc	1959Bi10
5.44 25	3450 190	Coul Ex (x,x′)	1960El07
4.5 7	4300 700	Coul Ex (x,x′γ)	1961Go09
5.57 30	3370 150	Delayed Coinc	1962Bi05
5.26 26	3560 140	Delayed Coinc	1966Fu03
5.08 15	3690 80	Pulsed Beam	1967Wo06
5.15 21	3640 120	Delayed Coinc	1968Ku03
5.02 24	3740 140	Delayed Coinc	1968Sc04
5.01 27	3740 170	Delayed Coinc	1969Av01
4.97 14	3770 140	Coul Ex (x,x′)	1972Er04
5.00 5	3740 70	Coul Ex (x,x′)	1974Sh12
5.03 8	3720 90	Coul Ex (x,x′)	1974Wo01
4.97 5	3770 70	Coul Ex (x,x′)	1977Ro08
4.94 20	3790 190	Muonic X-ray	1983La08
4.48 5	4180 80	Electron Scatt	1985Bo31
$^{160}_{64}$Gd$_{96}$ 75.26 1 keV ($\alpha = 7.24$)			
5.25 6	3910 80	ADOPTED VALUE	
5.71 25	3600 190	Coul Ex (x,x′)	1958Ra12

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
5.80 *38*	3550 *200*	Delayed Coinc	1959Bi10
5.80 *25*	3540 *180*	Coul Ex (x,x′)	1960El07
5.43 *40*	3800 *310*	Coul Ex Ce(K)	1963Gr04
5.23 *15*	3920 *80*	Pulsed Beam	1967Wo06
5.31 *17*	3870 *90*	Pulsed Beam	1968Ri09
5.29 *16*	3880 *80*	Delayed Coinc	1969Av01
5.23 *6*	3920 *10*	Delayed Coinc	1971Sp06
5.24 *10*	3910 *110*	Coul Ex (x,x′)	1972Er04
5.23 *7*	3920 *90*	Coul Ex (x,x′)	1974Sh12
5.15 *5*	3980 *70*	Coul Ex (x,x′)	1977Ro08
5.24 *21*	3920 *190*	Muonic X-ray	1983La08
$^{162}_{64}\mathrm{Gd}_{98}$ 71 *7* keV ($\alpha \sim 9.09$)			
$^{142}_{66}\mathrm{Dy}_{76}$ 315.9 *4* keV ($\alpha = 0.0548$)			
$^{144}_{66}\mathrm{Dy}_{78}$ 492.5 *3* keV ($\alpha = 0.0157$)			
$^{146}_{66}\mathrm{Dy}_{80}$ 682.9 *3* keV ($\alpha = 0.00702$)			
$^{148}_{66}\mathrm{Dy}_{82}$ 1677.3 *10* keV ($\alpha = 0.001106$)			
$^{150}_{66}\mathrm{Dy}_{84}$ 803.4 *5* keV ($\alpha = 0.00486$)			
$^{152}_{66}\mathrm{Dy}_{86}$ 613.81 *7* keV ($\alpha = 0.00904$)			
0.43 *23*	15 *8*	Recoil Dist	1979DuZY
$^{154}_{66}\mathrm{Dy}_{88}$ 334.58 *8* keV ($\alpha = 0.0462$)			
2.39 *13*	39.0 *20*	ADOPTED VALUE	
2.2 *11*	58 *29*	Recoil Dist	1978DuZY
2.49 *10*	37.4 *15*	Recoil Dist	1982Pa10
2.21 *14*	42.3 *27*	Recoil Dist	1985Az02
2.49 *10*	37.4 *15*	Recoil Dist	1985Az02
$^{156}_{66}\mathrm{Dy}_{90}$ 137.83 *3* keV ($\alpha = 0.848$)			
3.710 *40*	1203 *19*	ADOPTED VALUE	
3.79 *30*	1180 *100*	Coul Ex (x,x′)	1963Bj04
3.79 *25*	1180 *70*	Delayed Coinc	1966Ab02
3.46 *33*	1300 *120*	Delayed Coinc	1970Mo39
3.720 *30*	1200 *16*	Coul Ex (x,x′)	1977Ro27
$^{158}_{66}\mathrm{Dy}_{92}$ 98.9180 *10* keV ($\alpha = 2.83$)			
4.66 *5*	2440 *44*	ADOPTED VALUE	
4.67 *40*	2450 *230*	Coul Ex (x,x′)	1963Bj04
4.65 *31*	2450 *140*	Delayed Coinc	1966Ab02
4.82 *27*	2370 *120*	Delayed Coinc	1966Fu03
4.49 *29*	2540 *140*	Delayed Coinc	1968Sc04
4.85 *27*	2350 *120*	Delayed Coinc	1970Mo39
4.670 *40*	2435 *39*	Coul Ex (x,x′)	1977Ro27
$^{160}_{66}\mathrm{Dy}_{94}$ 86.7882 *4* keV ($\alpha = 4.57$)			
5.13 *11*	2900 *40*	ADOPTED VALUE	
5.8 *7*	2600 *290*	Delayed Coinc	1952Mc03
4.46 *30*	3350 *250*	Coul Ex (x,x′)	1960El07
6.08 *41*	2450 *140*	Delayed Coinc	1962Be46
4.61 *16*	3230 *90*	Delayed Coinc	1962Ri07
5.01 *8*	2971 *23*	Delayed Coinc	1963De21
5.37 *18*	2770 *70*	Delayed Coinc	1963Fo02
5.13 *17*	2870 *70*	Delayed Coinc	1963Li04
5.46 *19*	2730 *70*	Delayed Coinc	1964Do06
5.18 *15*	2870 *60*	Delayed Coinc	1965Gu02
5.16 *15*	2890 *60*	Delayed Coinc	1965Me08
5.11 *27*	2910 *130*	Delayed Coinc	1966Fu03
5.13 *17*	2900 *70*	Delayed Coinc	1968Ku03
5.16 *29*	2890 *140*	Delayed Coinc	1969Fo08
5.87 *31*	2540 *120*	Delayed Coinc	1970Mo39
5.24 *15*	2840 *60*	Delayed Coinc	1971Ab05
5.08 *9*	2929 *29*	Delayed Coinc	1972Lo01
4.71 *22*	3160 *120*	Delayed Coinc	1981Is14
$^{162}_{66}\mathrm{Dy}_{96}$ 80.660 *2* keV ($\alpha = 6.17$)			
5.35 *11*	3160 *40*	ADOPTED VALUE	
5.43 *33*	3120 *160*	Delayed Coinc	1959Bi10
5.11 *15*	3310 *130*	Coul Ex (x,x′)	1960El07
5.0 *8*	3500 *600*	Coul Ex (x,x′γ)	1961Go09
4.67 *40*	3650 *340*	Coul Ex (x,x′)	1963Bj04
4.80 *35*	3540 *290*	Coul Ex Ce(K)	1963Gr04
4.68 *35*	3630 *300*	Coul Ex Ce(K)	1963Gr04
5.22 *21*	3250 *100*	Delayed Coinc	1963Li04
5.9 *7*	2900 *300*	Recoil Dist	1967As03
5.36 *13*	3160 *50*	Pulsed Beam	1967Ku07
5.38 *5*	3140 *60*	Coul Ex (x,x′)	1972Er04
5.57 *41*	3050 *200*	Delayed Coinc	1973Ch28
5.39 *10*	3140 *90*	Muonic X-ray	1970Hi03
$^{164}_{66}\mathrm{Dy}_{98}$ 73.392 *5* keV ($\alpha = 8.96$)			
5.60 *5*	3490 *60*	ADOPTED VALUE	
5.8 *6*	3410 *310*	Delayed Coinc	1959Bi10
5.64 *25*	3470 *190*	Coul Ex (x,x′)	1960El07
5.68 *14*	3440 *50*	Pulsed Beam	1967Ku07
5.66 *23*	3460 *110*	Delayed Coinc	1969Av01
5.57 *5*	3510 *60*	Coul Ex (x,x′)	1972Er04
5.55 *9*	3530 *90*	Coul Ex (x,x′)	1973Gr05
5.59 *10*	3500 *90*	Coul Ex (x,x′)	1974Sh12
5.66 *6*	3460 *70*	Coul Ex (x,x′)	1974Wo01
5.48 *10*	3570 *100*	Muonic X-ray	1970Hi03
$^{166}_{66}\mathrm{Dy}_{100}$ 76.587 *1* keV ($\alpha = 7.43$)			
$^{144}_{68}\mathrm{Er}_{76}$ 330 *10* keV ($\alpha \sim 0.0516$)			
$^{146}_{68}\mathrm{Er}_{78}$			
$^{148}_{68}\mathrm{Er}_{80}$ 646.6 *3* keV ($\alpha = 0.00873$)			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{150}_{68}Er_{82}$ 1578.87 *18* keV ($\alpha = 0.001376$)			
$^{152}_{68}Er_{84}$ 808.27 *10* keV ($\alpha = 0.00527$)			
$^{154}_{68}Er_{86}$ 560.0 *10* keV ($\alpha = 0.01223$)			
$^{156}_{68}Er_{88}$ 344.51 *6* keV ($\alpha = 0.0455$)			
1.64 *7*	49.0 *20*	ADOPTED VALUE	
1.68 *9*	47.9 *25*	Recoil Dist	1969Di02
1.61 *6*	50.0 *18*	Recoil Dist	1979Bo29
$^{158}_{68}Er_{90}$ 192.15 *3* keV ($\alpha = 0.285$)			
3.05 *24*	400 *30*	ADOPTED VALUE	
2.81 *15*	433 *22*	Recoil Dist	1969Di02
3.28 *19*	371 *20*	Recoil Dist	1986Os02
$^{160}_{68}Er_{92}$ 125.8 *1* keV ($\alpha = 1.245$)			
4.38 *20*	1320 *50*	ADOPTED VALUE	
4.36 *25*	1330 *70*	Recoil Dist	1969Di02
4.5 *7*	1310 *200*	Recoil Dist	1972Bo04
4.9 *9*	1230 *220*	Delayed Coinc	1978Ad03
4.36 *18*	1326 *45*	Recoil Dist	1979Bo29
$^{162}_{68}Er_{94}$ 102.04 *3* keV ($\alpha = 2.69$)			
5.01 *6*	1993 *40*	ADOPTED VALUE	
4.89 *25*	2050 *120*	Coul Ex (x,x′)	1963Bj04
6.0 *6*	1690 *140*	Delayed Coinc	1970Mo39
5.010 *30*	1993 *28*	Coul Ex (x,x′)	1977Ro27
$^{164}_{68}Er_{96}$ 91.40 *2* keV ($\alpha = 4.10$)			
5.45 *6*	2303 *45*	ADOPTED VALUE	
7.1 *26*	2000 *700*	Delayed Coinc	1954Br96
5.04 *35*	2500 *190*	Coul Ex (x,x′)	1960El07
5.02 *14*	2499 *46*	Delayed Coinc	1963De21
6.09 *26*	2060 *70*	Delayed Coinc	1963Fo02
5.73 *27*	2190 *90*	Delayed Coinc	1968Se02
5.89 *37*	2140 *120*	Delayed Coinc	1970Mo39
5.480 *40*	2290 *36*	Coul Ex (x,x′)	1977Ro27
$^{166}_{68}Er_{98}$ 80.577 *7* keV ($\alpha = 6.71$)			
5.83 *5*	2672 *47*	ADOPTED VALUE	
6.4 *8*	2450 *290*	Delayed Coinc	1950Mc79
5.94 *25*	2630 *90*	Delayed Coinc	1955Gr07
6.1 *5*	2550 *190*	Delayed Coinc	1959Bi10
5.5 *6*	2890 *290*	Delayed Coinc	1960Be28
5.66 *25*	2760 *150*	Coul Ex (x,x′)	1960El07
5.5 *6*	2860 *300*	Delayed Coinc	1961Bo05
5.54 *25*	2810 *100*	Delayed Coinc	1961Ge14
6.9 *12*	2330 *420*	Coul Ex (x,x′γ)	1961Go09
5.70 *35*	2740 *140*	Delayed Coinc	1962Ba30
6.16 *24*	2530 *80*	Delayed Coinc	1963De21
6.00 *22*	2600 *70*	Delayed Coinc	1963Fo02
5.91 *25*	2640 *90*	Delayed Coinc	1963Li04
5.83 *38*	2680 *150*	Recoil Dist	1967As03
5.78 *14*	2696 *42*	Delayed Coinc	1967Ku07
5.91 *21*	2640 *70*	Delayed Coinc	1968Ku03
5.69 *16*	2740 *100*	Coul Ex (x,x′γ)	1970KaZK
5.44 *29*	2870 *130*	Delayed Coinc	1970Mo39
5.76 *10*	2700 *70*	Coul Ex (x,x′)	1972Er04
6.04 *6*	2580 *48*	Coul Ex (x,x′)	1972GrYQ
5.65 *6*	2760 *50*	Coul Ex (x,x′)	1973Be40
5.20 *30*	3000 *140*	Delayed Coinc	1973GrXX
5.80 *6*	2690 *50*	Coul Ex (x,x′)	1974Sh12
5.85 *5*	2663 *46*	Coul Ex (x,x′)	1974Wo01
5.91 *6*	2640 *50*	Coul Ex (x,x′)	1977Fi01
$^{168}_{68}Er_{100}$ 79.804 *1* keV ($\alpha = 6.97$)			
5.79 *10*	2730 *70*	ADOPTED VALUE	
6.3 *11*	2600 *430*	Delayed Coinc	1959Be73
6.1 *5*	2590 *190*	Delayed Coinc	1959Bi10
5.72 *20*	2770 *120*	Coul Ex (x,x′)	1960El07
7.3 *12*	2230 *390*	Coul Ex (x,x′γ)	1961Go09
5.71 *17*	2770 *60*	Delayed Coinc	1962Bo18
5.77 *23*	2740 *90*	Delayed Coinc	1963Li04
5.78 *36*	2740 *140*	Delayed Coinc	1964Ja09
5.94 *15*	2664 *42*	Pulsed Beam	1967Ku07
5.83 *21*	2710 *70*	Delayed Coinc	1968Ku03
5.71 *11*	2770 *29*	Delayed Coinc	1972BeVM
5.76 *10*	2750 *70*	Coul Ex (x,x′)	1972Er04
6.38 *29*	2480 *90*	Delayed Coinc	1974Aw03
6.00 *11*	2640 *70*	Coul Ex (x,x′)	1974Sh12
5.90 *10*	2680 *70*	Coul Ex (x,x′)	1975Le22
6.00 *12*	2640 *80*	Muonic X-ray	1970Hi03
$^{170}_{68}Er_{102}$ 78.591 *22* keV ($\alpha = 7.41$)			
5.82 *10*	2780 *70*	ADOPTED VALUE	
5.44 *15*	2980 *110*	Coul Ex (x,x′)	1960El07
6.13 *45*	2650 *220*	Coul Ex Ce(K)	1963Gr04
5.92 *15*	2734 *42*	Pulsed Beam	1967Ku07
5.97 *21*	2710 *70*	Pulsed Beam	1968Ri09
5.77 *28*	2810 *110*	Delayed Coinc	1969Av01
5.81 *10*	2780 *70*	Coul Ex (x,x′)	1972Er04
5.97 *20*	2710 *120*	Muonic X-ray	1970Hi03
$^{172}_{68}Er_{104}$ 77.0 *4* keV ($\alpha = 8.05$)			
$^{152}_{70}Yb_{82}$ 1531.4 *5* keV ($\alpha = 0.00162$)			
$^{154}_{70}Yb_{84}$ 821.3 *2* keV ($\alpha = 0.00560$)			
$^{156}_{70}Yb_{86}$ 536.4 *1* keV ($\alpha = 0.01491$)			
$^{158}_{70}Yb_{88}$ 358.2 *1* keV ($\alpha = 0.0437$)			
1.87 *23*	36.1 *43*	Recoil Dist	1975Tr08

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{160}_{70}$Yb$_{90}$ 243.1 *1* keV ($\alpha = 0.1409$)			
2.66 *16*	159 *9*	ADOPTED VALUE	
2.32 *8*	182 *6*	Recoil Dist	1976Bo27
2.66 *16*	159 *9*	Recoil Dist	1988Fe01
$^{162}_{70}$Yb$_{92}$ 166.85 *4* keV ($\alpha = 0.503$)			
3.53 *15*	600 *30*	ADOPTED VALUE	
3.7 *6*	580 *90*	Recoil Dist	1976Bo27
3.36 *30*	630 *50*	Recoil Dist	1978Ba16
3.45 *9*	613 *14*	Recoil Dist	1979Ri06
3.67 *14*	577 *19*	Recoil Dist	1992Mc02
$^{164}_{70}$Yb$_{94}$ 123.36 *4* keV ($\alpha = 1.443$)			
4.38 *26*	1340 *70*	ADOPTED VALUE	
4.60 *21*	1270 *50*	Recoil Dist	1976Bo27
4.18 *16*	1401 *45*	Recoil Dist	1978Ba16
4.26 *34*	1380 *100*	Recoil Dist	1979Ri06
$^{166}_{70}$Yb$_{96}$ 102.37 *3* keV ($\alpha = 2.90$)			
5.24 *31*	1780 *90*	ADOPTED VALUE	
5.21 *30*	1790 *90*	Recoil Dist	1976Bo27
5.30 *34*	1760 *100*	Recoil Dist	1979Ri06
$^{168}_{70}$Yb$_{98}$ 87.73 *1* keV ($\alpha = 5.30$)			
5.58 *30*	2200 *70*	ADOPTED VALUE	
5.43 *25*	2300 *130*	Coul Ex (x,x′)	1963Bj04
5.7 *9*	2260 *400*	Coul Ex (x,x′γ)	1971RiZJ
5.770 *40*	2161 *34*	Coul Ex (x,x′)	1977Ro27
5.58 *30*	2240 *100*	Recoil Dist	1979Ri06
$^{170}_{70}$Yb$_{100}$ 84.25474 *8* keV ($\alpha = 6.22$)			
5.79 *13*	2300 *30*	ADOPTED VALUE	
5.88 *24*	2270 *70*	Delayed Coinc	1952Gr18
5.79 *41*	2310 *140*	Delayed Coinc	1956De57
5.77 *30*	2310 *100*	Delayed Coinc	1959Si74
5.53 *25*	2410 *130*	Coul Ex (x,x′)	1960El07
5.70 *29*	2340 *100*	Delayed Coinc	1961Go24
5.74 *26*	2320 *90*	Delayed Coinc	1962El03
6.28 *22*	2120 *60*	Delayed Coinc	1963Fo02
5.63 *22*	2370 *70*	Delayed Coinc	1965Me08
5.92 *24*	2250 *70*	Delayed Coinc	1965Ro17
5.84 *33*	2280 *70*	Pulsed Beam	1965Ti02
5.93 *36*	2250 *120*	Delayed Coinc	1966Fu03
5.77 *23*	2310 *70*	Delayed Coinc	1966Ra04
5.84 *16*	2279 *43*	Delayed Coinc	1967Ba27
5.76 *12*	2308 *29*	Delayed Coinc	1972Gr05
5.69 *12*	2337 *29*	Delayed Coinc	1972Gu03
6.3 *9*	2160 *290*	Mossbauer	1962Wa19
$^{172}_{70}$Yb$_{102}$ 78.7427 *6* keV ($\alpha = 8.18$)			
6.04 *7*	2430 *50*	ADOPTED VALUE	
5.89 *20*	2490 *110*	Coul Ex (x,x′)	1960El07
6.2 *6*	2400 *200*	Delayed Coinc	1962Bi05
6.8 *5*	2160 *140*	Delayed Coinc	1963He01
6.49 *22*	2270 *60*	Delayed Coinc	1964Gu01
5.97 *22*	2460 *70*	Pulsed Beam	1966Ti01
6.8 *18*	2300 *600*	Delayed Coinc	1968Ka01
6.45 *30*	2280 *90*	Delayed Coinc	1969Be34
6.4 *5*	2310 *160*	Delayed Coinc	1969Fo07
6.11 *35*	2410 *120*	Delayed Coinc	1969Fo07
6.03 *20*	2440 *60*	Delayed Coinc	1969FuZX
5.66 *21*	2600 *70*	Delayed Coinc	1970Ra18
5.95 *48*	2480 *220*	Coul Ex (x,x′γ)	1970Sa09
6.03 *6*	2435 *46*	Coul Ex (x,x′)	1975Wo08
6.0 *6*	2470 *270*	Coul Ex (x,x′γ)	1992Fa05
$^{174}_{70}$Yb$_{104}$ 76.471 *1* keV ($\alpha = 9.22$)			
5.94 *6*	2570 *49*	ADOPTED VALUE	
5.89 *20*	2590 *110*	Coul Ex (x,x′)	1960El07
5.6 *7*	2750 *300*	Pulsed Beam	1962Bi05
5.54 *30*	2760 *170*	Coul Ex (x,x′)	1963Bj04
5.90 *38*	2600 *140*	Delayed Coinc	1964Ja09
6.10 *37*	2510 *130*	Delayed Coinc	1966Fu03
5.90 *21*	2590 *70*	Pulsed Beam	1966Ti01
5.89 *47*	2610 *230*	Coul Ex (x,x′γ)	1970Sa09
5.97 *6*	2557 *49*	Coul Ex (x,x′)	1974Sh12
5.95 *6*	2565 *49*	Coul Ex (x,x′)	1975Wo08
$^{176}_{70}$Yb$_{106}$ 82.13 *2* keV ($\alpha = 6.90$)			
5.30 *19*	2610 *70*	ADOPTED VALUE	
5.78 *20*	2390 *100*	Coul Ex (x,x′)	1960El07
5.2 *8*	2720 *440*	Coul Ex (x,x′γ)	1961Go09
4.79 *37*	2900 *200*	Pulsed Beam	1962Bi05
5.28 *40*	2630 *220*	Coul Ex Ce(K)	1963Gr04
5.45 *20*	2540 *70*	Pulsed Beam	1966Ti01
5.35 *43*	2600 *230*	Coul Ex (x,x′γ)	1970Sa09
5.09 *14*	2720 *50*	Delayed Coinc	1971Sp06
5.41 *9*	2560 *70*	Coul Ex (x,x′)	1975Wo08
$^{178}_{70}$Yb$_{108}$ 84 *3* keV ($\alpha \sim 6.30$)			
$^{154}_{72}$Hf$_{82}$ 1513 *2* keV ($\alpha = 0.00183$)			
$^{156}_{72}$Hf$_{84}$ 858 *2* keV ($\alpha = 0.00561$)			
$^{158}_{72}$Hf$_{86}$ 476.36 *11* keV ($\alpha = 0.0218$)			
$^{160}_{72}$Hf$_{88}$ 389.6 *10* keV ($\alpha = 0.0371$)			
$^{162}_{72}$Hf$_{90}$ 285.0 *10* keV ($\alpha = 0.0918$)			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
1.35 *12*	148 *11*	Recoil Dist	1998We02
$^{164}_{72}Hf_{92}$ 211.05 *5* keV ($\alpha = 0.238$)			
2.14 *18*	370 *30*	ADOPTED VALUE	
2.14 *18*	370 *30*	Recoil Dist	1989Mu13
1.59 *10*	497 *29*	Recoil Dist	1998We02
$^{166}_{72}Hf_{94}$ 158.5 *3* keV ($\alpha = 0.632$)			
3.50 *20*	717 *34*	Recoil Dist	1977Bo14
$^{168}_{72}Hf_{96}$ 124.0 *2* keV ($\alpha = 1.54$)			
4.30 *23*	1280 *50*	Recoil Dist	1977Bo14
$^{170}_{72}Hf_{98}$ 100.80 *17* keV ($\alpha = 3.39$)			
5.3 *12*	1770 *400*	Recoil Dist	1977Bo14
$^{172}_{72}Hf_{100}$ 95.22 *4* keV ($\alpha = 4.24$)			
4.47 *33*	2240 *140*	Delayed Coinc	1967Ab06
$^{174}_{72}Hf_{102}$ 90.985 *19* keV ($\alpha = 5.08$)			
4.88 *31*	2210 *120*	ADOPTED VALUE	
5.26 *35*	2050 *150*	Coul Ex (x,x′)	1963Bj04
4.57 *32*	2370 *140*	Delayed Coinc	1965Ab02
4.45 *25*	2420 *120*	Delayed Coinc	1971Ch26
5.35 *35*	2020 *150*	Coul Ex (x,x′)	1971Ej01
$^{176}_{72}Hf_{104}$ 88.351 *24* keV ($\alpha = 5.72$)			
5.27 *10*	2140 *60*	ADOPTED VALUE	
5.27 *25*	2140 *120*	Coul Ex (x,x′)	1961Ha21
5.63 *21*	2010 *60*	Delayed Coinc	1963Fo02
5.78 *23*	1950 *100*	Coul Ex (x,x′)	1973Ha07
5.19 *5*	2174 *40*	Coul Ex (x,x′)	1977Ro08
5.29 *10*	2130 *60*	Muonic X-ray	1984Ta10
$^{178}_{72}Hf_{106}$ 93.180 *1* keV ($\alpha = 4.62$)			
4.82 *6*	2145 *44*	ADOPTED VALUE	
3.94 *26*	2630 *150*	Delayed Coinc	1959Bi10
4.66 *25*	2220 *140*	Coul Ex (x,x′)	1960El07
5.76 *42*	1800 *120*	Delayed Coinc	1961Ga05
4.3 *7*	2460 *440*	Coul Ex (x,x′γ)	1961Go09
4.82 *20*	2150 *70*	Delayed Coinc	1962Bo13
4.78 *14*	2164 *43*	Delayed Coinc	1962Ka14
4.51 *20*	2300 *120*	Coul Ex (x,x′)	1963Bj04
4.88 *24*	2120 *90*	Delayed Coinc	1963Fo02
4.80 *36*	2160 *140*	Delayed Coinc	1967Ab06
4.86 *5*	2127 *39*	Coul Ex (x,x′)	1977Ro08
4.91 *10*	2110 *60*	Muonic X-ray	1984Ta10
$^{180}_{72}Hf_{108}$ 93.326 *2* keV ($\alpha = 4.59$)			
4.67 *12*	2210 *40*	ADOPTED VALUE	
5.13 *41*	2020 *140*	Delayed Coinc	1955Su64
4.44 *32*	2330 *150*	Pulsed Beam	1959Bi10
4.68 *22*	2210 *90*	Delayed Coinc	1961Bo25
4.3 *7*	2470 *440*	Coul Ex (x,x′γ)	1961Go09
4.35 *20*	2370 *130*	Coul Ex (x,x′)	1961Ha21
4.77 *17*	2160 *60*	Delayed Coinc	1962Fo05
4.93 *35*	2100 *170*	Coul Ex Ce(K)	1963Gr04
4.68 *19*	2210 *70*	Delayed Coinc	1963Li04
4.73 *5*	2180 *41*	Coul Ex (x,x′)	1977Ro08
4.68 *7*	2204 *14*	Delayed Coinc	1996Al20
4.78 *10*	2160 *60*	Muonic X-ray	1984Ta10
$^{182}_{72}Hf_{110}$ 97.79 *9* keV ($\alpha = 3.81$)			
$^{184}_{72}Hf_{112}$ 107.4 *5* keV ($\alpha = 2.65$)			
$^{162}_{74}W_{88}$ 450.2 *3* keV ($\alpha = 0.0273$)			
$^{164}_{74}W_{90}$ 331.6 *3* keV ($\alpha = 0.0629$)			
$^{166}_{74}W_{92}$ 251.7 *2* keV ($\alpha = 0.1446$)			
$^{168}_{74}W_{94}$ 199.3 *2* keV ($\alpha = 0.309$)			
3.24 *18*	307 *15*	Recoil Dist	1984Dr02
$^{170}_{74}W_{96}$ 156.85 *14* keV ($\alpha = 0.708$)			
3.51 *10*	718 *14*	ADOPTED VALUE	
3.51 *10*	718 *14*	Recoil Dist	1980Mi16
3.6 *8*	720 *150*	Doppler Shift	1994Mc06
$^{172}_{74}W_{98}$ 123.2 *1* keV ($\alpha = 1.72$)			
5.02 *48*	1060 *90*	ADOPTED VALUE	
5.95 *42*	890 *60*	Doppler Shift	1986Ra07
5.02 *48*	1060 *90*	Doppler Shift	1991Mc04
$^{174}_{74}W_{100}$ 113.0 *1* keV ($\alpha = 2.40$)			
3.97 *28*	1650 *100*	Recoil Dist	1987Ga14
$^{176}_{74}W_{102}$ 109.08 *9* keV ($\alpha = 2.75$)			
$^{178}_{74}W_{104}$ 106.06 *22* keV ($\alpha = 3.07$)			
$^{180}_{74}W_{106}$ 103.557 *7* keV ($\alpha = 3.37$)			
4.25 *24*	1850 *90*	ADOPTED VALUE	
4.09 *19*	1920 *70*	Delayed Coinc	1962Fo05
4.46 *14*	1760 *40*	Delayed Coinc	1963Cu03
4.57 *18*	1720 *50*	Delayed Coinc	1963De21
3.97 *12*	1976 *43*	Delayed Coinc	1965Hu02
$^{182}_{74}W_{108}$ 100.1060 *1* keV ($\alpha = 3.86$)			
4.20 *8*	1990 *20*	ADOPTED VALUE	

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
4.59 40	1830 140	Delayed Coinc	1954Su10
4.4 5	1920 250	Coul Ex (x,x′γ)	1958Mc02
3.86 37	2180 190	Delayed Coinc	1959Bi10
4.00 20	2090 120	Coul Ex (x,x′)	1961Ha21
4.06 15	2060 60	Delayed Coinc	1962Bi05
3.76 30	2240 160	Delayed Coinc	1963Ba24
4.60 18	1820 60	Delayed Coinc	1963Fo02
4.58 40	1840 180	Coul Ex Ce(K)	1963Gr04
4.12 21	2030 90	Delayed Coinc	1963Ko02
4.16 32	2020 140	Delayed Coinc	1964Be36
3.96 27	2120 130	Delayed Coinc	1964Ro19
4.22 8	1980 20	Pulsed Beam	1964Sc21
4.17 12	2005 43	Delayed Coinc	1965Do02
4.23 13	1976 43	Delayed Coinc	1965Me08
4.00 14	2090 60	Delayed Coinc	1966Bl08
4.30 26	1950 100	Delayed Coinc	1966Fu03
4.06 17	2060 70	Delayed Coinc	1966Ra04
4.30 8	1940 50	Coul Ex (x,x′)	1968St13
3.92 11	2135 43	Delayed Coinc	1970Ab14
4.20 9	1991 29	Delayed Coinc	1971Ho14
4.21 7	1986 49	Coul Ex (x,x′)	1973Be40
3.74 15	2240 70	Delayed Coinc	1973GrXX
4.20 12	1991 43	Delayed Coinc	1983El02
5.0 5	1680 190	Coul Ex (x,x′γ)	1989Ku04
4.08 24	2060 140	Coul Ex (x,x′γ)	1989Wu04
4.29 12	1950 70	Muonic X-ray	1970Hi03
4.140 40	2019 36	Electron Scatt	1988PeZW
$^{184}_{74}W_{110}$ 111.208 4 keV ($\alpha = 2.58$)			
3.78 13	1790 50	ADOPTED VALUE	
4.37 43	1560 160	Coul Ex (x,x′γ)	1958Mc02
3.62 33	1880 160	Delayed Coinc	1959Bi10
3.68 26	1850 120	Delayed Coinc	1960Bo07
3.62 20	1870 120	Coul Ex (x,x′)	1961Ha21
3.43 6	1970 20	Delayed Coinc	1961KeZZ
3.78 13	1790 50	Delayed Coinc	1962Bi05
4.18 30	1630 130	Coul Ex Ce(K)	1963Gr04
3.78 15	1790 60	Delayed Coinc	1964Ko13
3.66 9	1850 30	Pulsed Beam	1965Sc05
3.86 31	1760 130	Recoil Dist	1967As03
3.84 7	1762 45	Coul Ex (x,x′)	1968St13
3.76 8	1800 50	Coul Ex (x,x′)	1975Le22
4.49 47	1520 170	Coul Ex (x,x′γ)	1989Ku04
3.88 20	1750 100	Coul Ex (x,x′γ)	1989Wu04
3.91 10	1730 60	Muonic X-ray	1970Hi03
3.70 40	1850 190	Mossbauer	1970Me09
3.67 37	1860 170	Mossbauer	1971Ob02
3.78 39	1800 170	Mossbauer	1984Al06
3.690 40	1833 33	Electron Scatt	1988PeZW
$^{186}_{74}W_{112}$ 122.33 7 keV ($\alpha = 1.77$)			
3.50 12	1540 40	ADOPTED VALUE	
3.58 36	1520 170	Coul Ex (x,x′γ)	1958Mc02
3.45 27	1570 110	Delayed Coinc	1959Bi10
3.57 25	1520 120	Coul Ex (x,x′)	1961Ha21
3.69 18	1460 60	Delayed Coinc	1962Bi05
3.0 5	1870 300	Recoil Dist	1967As03
3.35 9	1610 30	Pulsed Beam	1967Ku07
3.50 6	1539 38	Coul Ex (x,x′)	1968St13
3.37 8	1600 50	Coul Ex (x,x′)	1974Br31
3.60 6	1495 14	Delayed Coinc	1975Ka11
3.35 8	1610 50	Coul Ex (x,x′)	1975Le22
3.42 33	1590 170	Coul Ex (x,x′γ)	1989Ku04
3.46 12	1560 70	Muonic X-ray	1970Hi03
2.73 26	1990 170	Mossbauer	1970Me09
2.71 25	2010 170	Mossbauer	1971Ob02
$^{188}_{74}W_{114}$ 143 2 keV ($\alpha \sim 0.989$)			
$^{190}_{74}W_{116}$ 205 2 keV ($\alpha = 0.281$)			
$^{164}_{76}Os_{88}$ 548.0 9 keV ($\alpha = 0.0182$)			
$^{166}_{76}Os_{90}$ 430.8 9 keV ($\alpha = 0.0331$)			
$^{168}_{76}Os_{92}$ 341.2 2 keV ($\alpha = 0.0624$)			
$^{170}_{76}Os_{94}$ 286.70 14 keV ($\alpha = 0.1039$)			
$^{172}_{76}Os_{96}$ 227.77 9 keV ($\alpha = 0.214$)			
3.30 23	167 10	Recoil Dist	1995Vi05
$^{174}_{76}Os_{98}$ 158.7 2 keV ($\alpha = 0.738$)			
4.7 6	500 60	Recoil Dist	1987Ga12
$^{176}_{76}Os_{100}$ 135.1 4 keV ($\alpha = 1.333$)			
$^{178}_{76}Os_{102}$ 131.6 3 keV ($\alpha = 1.472$)			
$^{180}_{76}Os_{104}$ 132.3 3 keV ($\alpha = 1.443$)			
3.6 8	1210 250	Recoil Dist	1990Ka11
$^{182}_{76}Os_{106}$ 127.0 1 keV ($\alpha = 1.69$)			
3.86 35	1200 100	ADOPTED VALUE	
3.92 9	1173 16	Delayed Coinc	1970BrZP
3.40 39	1370 140	Delayed Coinc	1970ErZY
$^{184}_{76}Os_{108}$ 119.80 9 keV ($\alpha = 2.11$)			
3.23 16	1650 70	ADOPTED VALUE	

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
3.13 *16*	1700 *70*	Delayed Coinc	1970Be18
3.48 *13*	1529 *43*	Delayed Coinc	1970BrZP
3.36 *18*	1590 *70*	Delayed Coinc	1970ErZY
3.11 *6*	1708 *19*	Delayed Coinc	1971Bb09
3.2 *6*	1730 *350*	Coul Ex (x,x′γ)	1972La16
$^{186}_{76}$Os$_{110}$ 137.159 *8* keV ($\alpha = 1.259$)			
2.90 *10*	1280 *50*	ADOPTED VALUE	
3.27 *43*	1150 *140*	Delayed Coinc	1951Mc14
1.51 *34*	2600 *600*	Delayed Coinc	1953Mc39
4.8 *16*	870 *290*	Delayed Coinc	1957Be73
3.07 *13*	1212 *43*	Delayed Coinc	1961Bo08
4.3 *11*	930 *240*	Coul Ex Ce(L)	1961Re02
2.97 *15*	1260 *60*	Delayed Coinc	1962Ba14
3.15 *13*	1183 *43*	Delayed Coinc	1963Fo02
3.05 *9*	1219 *29*	Delayed Coinc	1964Ro19
3.10 *40*	1220 *160*	Coul Ex (x,x′γ)	1967Ca08
2.95 *40*	1280 *180*	Coul Ex (x,x′γ)	1967Gi02
3.19 *14*	1169 *43*	Delayed Coinc	1968Ma14
3.08 *20*	1210 *70*	Delayed Coinc	1970Be18
2.79 *7*	1332 *26*	Delayed Coinc	1971Bb09
3.21 *28*	1170 *110*	Coul Ex (x,x′γ)	1971Mi08
2.88 *39*	1320 *190*	Coul Ex (x,x′γ)	1972La16
3.10 *25*	1210 *100*	Coul Ex (x,x′)	1976Ba06
2.78 *5*	1339 *32*	Coul Ex (x,x′γ)	1996Wu07
3.150 *30*	1181 *18*	Muonic X-ray	1977Ho23
$^{188}_{76}$Os$_{112}$ 155.021 *11* keV ($\alpha = 0.802$)			
2.55 *5*	992 *24*	ADOPTED VALUE	
2.8 *7*	940 *220*	Delayed Coinc	1955Su64
3.5 *10*	800 *240*	Coul Ex (x,x′γ)	1957Ba11
2.79 *31*	920 *110*	Coul Ex (x,x′γ)	1958Mc02
3.17 *33*	810 *90*	Coul Ex (x,x′γ)	1961Mc18
3.7 *5*	700 *100*	Coul Ex Ce(L)	1961Re02
2.43 *22*	1050 *90*	Delayed Coinc	1962Ba14
2.47 *8*	1024 *29*	Delayed Coinc	1963Fo02
2.43 *24*	1050 *100*	Coul Ex (x,x′γ)	1963Go05
2.48 *13*	1020 *50*	Recoil Dist	1966As03
2.70 *40*	960 *150*	Coul Ex (x,x′γ)	1967Ca08
2.58 *13*	981 *43*	Delayed Coinc	1968Ma14
2.47 *12*	1024 *43*	Delayed Coinc	1970Be18
2.90 *8*	873 *28*	Coul Ex (x,x′γ)	1970Pr09
2.44 *7*	1036 *25*	Delayed Coinc	1971Bb09
2.46 *8*	1030 *30*	Delayed Coinc	1971Bo13
2.78 *15*	910 *50*	Coul Ex (x,x′γ)	1971Mi08
2.69 *27*	950 *100*	Coul Ex (x,x′γ)	1972La16
2.52 *13*	1010 *60*	Coul Ex (x,x′)	1976Ba06
2.512 *32*	1007 *18*	Coul Ex (x,x′γ)	1996Wu07
2.46 *13*	1030 *50*	Coul Ex (x,x′γ)	1997Bb08
2.840 *30*	891 *14*	Muonic X-ray	1977Ho23
2.635 *30*	960 *15*	Electron Scatt	1988Bo08
$^{190}_{76}$Os$_{114}$ 186.718 *2* keV ($\alpha = 0.416$)			
2.35 *6*	541 *15*	ADOPTED VALUE	
2.5 *7*	560 *170*	Coul Ex (x,x′γ)	1957Ba11
2.1 *8*	720 *290*	Delayed Coinc	1958Be72
2.53 *26*	510 *50*	Coul Ex (x,x′γ)	1958Mc02
3.8 *6*	350 *60*	Delayed Coinc	1958Su54
2.70 *27*	475 *49*	Coul Ex (x,x′γ)	1961Mc18
3.38 *40*	381 *46*	Coul Ex Ce(L)	1961Re02
1.87 *9*	680 *30*	Recoil Dist	1967As03
2.50 *37*	520 *80*	Coul Ex (x,x′γ)	1967Ca08
2.39 *6*	532 *15*	Coul Ex (x,x′γ)	1970Pr09
2.37 *13*	537 *31*	Coul Ex (x,x′γ)	1971Mi08
2.48 *25*	520 *50*	Coul Ex (x,x′γ)	1972La16
2.14 *11*	595 *32*	Coul Ex (x,x′)	1976Ba06
2.35 *5*	541 *13*	Coul Ex (x,x′γ)	1996Wu07
2.480 *20*	512 *6*	Muonic X-ray	1977Ho23
2.315 *27*	549 *8*	Electron Scatt	1988Bo08
$^{192}_{76}$Os$_{116}$ 205.79561 *6* keV ($\alpha = 0.299$)			
2.100 *30*	405 *7*	ADOPTED VALUE	
2.1 *6*	450 *140*	Coul Ex (x,x′γ)	1957Ba11
2.03 *21*	424 *44*	Coul Ex (x,x′γ)	1958Mc02
2.32 *23*	371 *38*	Coul Ex (x,x′γ)	1961Mc18
2.92 *40*	297 *41*	Coul Ex Ce(L)	1961Re02
2.22 *34*	390 *60*	Coul Ex (x,x′γ)	1967Ca08
1.92 *25*	450 *60*	Coul Ex (x,x′γ)	1967Gi02
2.04 *6*	418 *13*	Coul Ex (x,x′γ)	1970Pr09
1.99 *11*	429 *25*	Coul Ex (x,x′γ)	1971Mi08
2.09 *21*	411 *42*	Coul Ex (x,x′γ)	1972La16
1.98 *14*	433 *29*	Delayed Coinc	1973Ch26
1.90 *9*	449 *22*	Coul Ex (x,x′)	1976Ba06
2.030 *13*	419.3 *36*	Coul Ex (x,x′)	1988Li22
2.119 *25*	402 *6*	Coul Ex (x,x′γ)	1996Wu07
1.97 *16*	435 *36*	Coul Ex (x,x′γ)	1997Bb08
2.100 *20*	405.3 *48*	Muonic X-ray	1977Ho23
2.009 *32*	424 *8*	Muonic X-ray	1984Re10
2.009 *32*	424 *8*	Electron Scatt	1984Re10
1.999 *23*	426 *6*	Electron Scatt	1988Bo08
$^{194}_{76}$Os$_{118}$ 218.509 *6* keV ($\alpha = 0.245$)			
$^{196}_{76}$Os$_{120}$ 300 *20* keV ($\alpha \sim 0.0907$)			
$^{168}_{78}$Pt$_{90}$ 582.0 *20* keV ($\alpha = 0.0172$)			
$^{170}_{78}$Pt$_{92}$ 509 *2* keV ($\alpha = 0.0236$)			
$^{172}_{78}$Pt$_{94}$ 457 *2* keV ($\alpha = 0.0308$)			
$^{174}_{78}$Pt$_{96}$ 394 *2* keV ($\alpha = 0.0453$)			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{176}_{78}$Pt$_{98}$ 263.9 *10* keV ($\alpha = 0.1444$)			
2.58 *28*	109 *10*	Recoil Dist	1986Dr05
$^{178}_{78}$Pt$_{100}$ 170.1 *10* keV ($\alpha = 0.627$)			
$^{180}_{78}$Pt$_{102}$ 152.23 *24* keV ($\alpha = 0.938$)			
4.81 *49*	540 *50*	Recoil Dist	1990De04
$^{182}_{78}$Pt$_{104}$ 154.9 *1* keV ($\alpha = 0.880$)			
$^{184}_{78}$Pt$_{106}$ 162.97 *8* keV ($\alpha = 0.731$)			
3.78 *27*	545 *35*	ADOPTED VALUE	
3.95 *16*	519 *17*	Delayed Coinc	1972Fi12
3.53 *15*	582 *22*	Recoil Dist	1986Ga21
$^{186}_{78}$Pt$_{108}$ 191.53 *4* keV ($\alpha = 0.413$)			
2.99 *13*	375 *14*	ADOPTED VALUE	
2.99 *13*	375 *14*	Delayed Coinc	1972Fi12
3.06 *28*	369 *35*	Recoil Dist	1990WeZZ
$^{188}_{78}$Pt$_{110}$ 265.63 *5* keV ($\alpha = 0.1414$)			
2.69 *49*	104 *19*	Delayed Coinc	1972Fi12
$^{190}_{78}$Pt$_{112}$ 295.80 *4* keV ($\alpha = 0.1019$)			
1.75 *22*	95 *12*	ADOPTED VALUE	
1.75 *22*	95 *12*	Coul Ex (x,x′γ)	1966Gr20
2.8 *9*	65 *22*	Delayed Coinc	1972Fi12
$^{192}_{78}$Pt$_{114}$ 316.50819 *1* keV ($\alpha = 0.0835$)			
1.870 *40*	63.4 *14*	ADOPTED VALUE	
3.08 *41*	39 *5*	Delayed Coinc	1963De21
1.95 *23*	62 *7*	Coul Ex (x,x′γ)	1966Gr20
2.34 *19*	51.0 *40*	Delayed Coinc	1966Sc06
2.49 *34*	49 *6*	Delayed Coinc	1970Be08
2.000 *40*	59.3 *12*	Coul Ex (x,x′γ)	1970Br26
2.10 *12*	56.6 *33*	Coul Ex (x,x′γ)	1971Mi08
1.92 *7*	61.7 *21*	Delayed Coinc	1973Sm01
2.36 *25*	51 *5*	Delayed Coinc	1976Bu20
1.70 *9*	70.0 *36*	Recoil Dist	1977Jo05
1.890 *30*	62.8 *10*	Coul Ex (x,x′)	1977Ro16
1.81 *9*	65.7 *31*	Coul Ex (x,x′γ)	1984Mu19
1.833 *20*	64.7 *8*	Coul Ex (x,x′)	1987Gy01
$^{194}_{78}$Pt$_{116}$ 328.453 *10* keV ($\alpha = 0.0750$)			
1.642 *22*	60.5 *9*	ADOPTED VALUE	
1.94 *19*	52 *5*	Coul Ex (x,x′γ)	1961Mc01
1.640 *40*	60.6 *15*	Coul Ex (x,x′)	1969Gl08
1.87 *9*	53.2 *26*	Coul Ex (x,x′γ)	1971Mi08
1.36 *6*	73.0 *30*	Recoil Dist	1971NoZT
2.01 *20*	50 *5*	Delayed Coinc	1972Be53
1.99 *27*	51 *7*	Reson Fluor	1972Sh38
1.67 *13*	59.8 *47*	Coul Ex (x,x′)	1976Ba23
1.53 *8*	64.9 *35*	Recoil Dist	1977Jo05
1.680 *30*	59.1 *11*	Coul Ex (x,x′)	1977Ro16
1.620 *15*	61.3 *6*	Coul Ex (x,x′γ)	1978Ba38
1.43 *9*	69.6 *44*	Recoil Dist	1986Bi13
1.661 *11*	59.79 *45*	Coul Ex (x,x′)	1986Gy04
1.50 *8*	66.4 *36*	Coul Ex (x,x′)	1996Wu07
1.636 *48*	60.8 *18*	Electron Scatt	1988Bo08
$^{196}_{78}$Pt$_{118}$ 355.6841 *20* keV ($\alpha = 0.0599$)			
1.375 *16*	49.2 *6*	ADOPTED VALUE	
1.27 *13*	54 *5*	Coul Ex (x,x′γ)	1961Mc01
1.34 *17*	51 *7*	Coul Ex (x,x′γ)	1966Gr20
1.39 *15*	49 *5*	Coul Ex (x,x′γ)	1967Ka16
1.49 *5*	45.5 *16*	Coul Ex (x,x′)	1969Gl08
1.350 *40*	50.1 *15*	Coul Ex (x,x′γ)	1970Br26
1.55 *8*	43.8 *23*	Coul Ex (x,x′γ)	1971Mi08
1.34 *13*	51 *5*	Recoil Dist	1971NoZT
1.56 *11*	43.6 *30*	Delayed Coinc	1972Be53
1.36 *11*	50.1 *41*	Coul Ex (x,x′)	1976Ba35
1.33 *6*	50.8 *22*	Recoil Dist	1979Bo31
1.46 *7*	46.5 *21*	Recoil Dist	1981Bo32
1.42 *7*	47.9 *22*	Coul Ex (x,x′γ)	1984Mu19
1.380 *20*	49.0 *7*	Coul Ex (x,x′)	1985Fe03
1.25 *9*	54.5 *37*	Recoil Dist	1986Bi13
1.382 *6*	48.94 *24*	Coul Ex (x,x′)	1986Gy04
1.3680 *40*	49.44 *17*	Coul Ex (x,x′)	1992Li14
1.422 *36*	47.6 *12*	Electron Scatt	1988Bo08
$^{198}_{78}$Pt$_{120}$ 407.22 *5* keV ($\alpha = 0.0415$)			
1.080 *12*	32.40 *39*	ADOPTED VALUE	
1.49 *16*	23.8 *25*	Coul Ex (x,x′γ)	1955St57
1.04 *16*	34 *5*	Coul Ex (x,x′γ)	1966Gr20
1.01 *5*	34.7 *18*	Coul Ex (x,x′)	1969Gl08
0.980 *30*	35.7 *11*	Coul Ex (x,x′γ)	1970Br26
1.17 *5*	30.0 *13*	Coul Ex (x,x′γ)	1971Mi08
1.16 *9*	30.4 *24*	Coul Ex (x,x′)	1976Ba35
1.04 *5*	33.6 *16*	Recoil Dist	1980Ke04
1.00 *9*	35.1 *30*	Recoil Dist	1981Bo32
1.08 *5*	32.3 *15*	Coul Ex (x,x′γ)	1984Mu19
1.090 *7*	32.10 *24*	Coul Ex (x,x′)	1986Gy04
$^{200}_{78}$Pt$_{122}$ 470.10 *20* keV ($\alpha = 0.0287$)			
$^{176}_{80}$Hg$_{96}$ 613.3 *20* keV ($\alpha = 0.0167$)			
$^{178}_{80}$Hg$_{98}$ 558.3 *10* keV ($\alpha = 0.0207$)			
$^{180}_{80}$Hg$_{100}$ 434.1 *10* keV ($\alpha = 0.0381$)			
$^{182}_{80}$Hg$_{102}$ 351.8 *3* keV ($\alpha = 0.0669$)			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{184}_{80}Hg_{104}$ 366.51 *23* keV ($\alpha = 0.0597$)			
2.05 *49*	30 *7*	Recoil Dist	1973Ru08
$^{186}_{80}Hg_{106}$ 405.33 *14* keV ($\alpha = 0.0456$)			
1.41 *24*	26.0 *43*	Recoil Dist	1974Pr02
$^{188}_{80}Hg_{108}$ 412.8 *1* keV ($\alpha = 0.0434$)			
$^{190}_{80}Hg_{110}$ 416.4 *2* keV ($\alpha = 0.0425$)			
$^{192}_{80}Hg_{112}$ 422.8 *1* keV ($\alpha = 0.0408$)			
$^{194}_{80}Hg_{114}$ 428.0 *2* keV ($\alpha = 0.0395$)			
$^{196}_{80}Hg_{116}$ 425.98 *10* keV ($\alpha = 0.0400$)			
1.15 *5*	24.4 *11*	ADOPTED VALUE	
1.46 *22*	19.6 *29*	Delayed Coinc	1963De21
1.120 *20*	24.99 *48*	Coul Ex (x,x$'\gamma$)	1979Bo16
$^{198}_{80}Hg_{118}$ 411.80249 *1* keV ($\alpha = 0.0437$)			
0.990 *12*	33.36 *42*	ADOPTED VALUE	
1.10 *25*	32 *7*	Reson Fluor	1953Da23
1.06 *10*	31.5 *30*	Reson Fluor	1954Me55
1.13 *34*	32 *10*	Coul Ex (x,x$'\gamma$)	1956Ba45
1.24 *41*	30 *10*	Delayed Coinc	1958Su57
0.96 *14*	35 *5*	Delayed Coinc	1961Si01
0.676 *42*	49.0 *30*	Reson Fluor	1963Fr05
0.95 *19*	36 *7*	Delayed Coinc	1966Go20
1.17 *18*	28.9 *43*	Delayed Coinc	1967Be62
0.86 *9*	38.9 *39*	Delayed Coinc	1968Ra32
0.880 *30*	37.6 *13*	Coul Ex (x,x$'$)	1969GlZY
1.50 *8*	22.0 *12*	Delayed Coinc	1970BaYH
1.042 *48*	31.7 *14*	Delayed Coinc	1974Bu13
0.985 *6*	33.52 *22*	Coul Ex (x,x$'$)	1977Es02
0.991 *6*	33.32 *22*	Coul Ex (x,x$'$)	1979Bo16
$^{200}_{80}Hg_{120}$ 367.944 *10* keV ($\alpha = 0.0590$)			
0.853 *11*	67.0 *9*	ADOPTED VALUE	
0.85 *26*	74 *23*	Coul Ex (x,x$'\gamma$)	1956Ba45
0.95 *11*	61 *7*	Coul Ex (x,x$'\gamma$)	1970Ka09
0.80 *10*	73 *9*	Coul Ex (x,x$'\gamma$)	1971Ka03
0.853 *15*	67.0 *12*	Coul Ex (x,x$'\gamma$)	1979Bo16
0.853 *7*	67.0 *6*	Coul Ex (x,x$'$)	1980Sp05
$^{202}_{80}Hg_{122}$ 439.562 *10* keV ($\alpha = 0.0369$)			
0.612 *10*	39.2 *7*	ADOPTED VALUE	
0.74 *15*	34 *7*	Reson Fluor	1955Me35
0.59 *18*	45 *14*	Coul Ex (x,x$'\gamma$)	1956Ba45
0.65 *8*	37.5 *46*	Coul Ex (x,x$'\gamma$)	1970Ka09
0.616 *9*	38.9 *6*	Coul Ex (x,x$'\gamma$)	1979Bo16
0.605 *5*	39.65 *35*	Coul Ex (x,x$'$)	1980Sp05
$^{204}_{80}Hg_{124}$ 436.552 *8* keV ($\alpha = 0.0376$)			
0.427 *7*	58.1 *10*	ADOPTED VALUE	
0.20 *10*	170 *80*	Coul Ex (x,x$'\gamma$)	1956Ba45
0.370 *40*	68 *7*	Coul Ex (x,x$'\gamma$)	1970Ka09
0.475 *23*	52.4 *26*	Coul Ex (x,x$'$)	1971FoZW
0.427 *6*	58.1 *8*	Coul Ex (x,x$'\gamma$)	1979Bo16
0.423 *5*	58.6 *7*	Coul Ex (x,x$'$)	1981Es03
$^{206}_{80}Hg_{126}$ 1068.54 *10* keV ($\alpha = 0.00530$)			
$^{182}_{82}Pb_{100}$ 888.3 *3* keV ($\alpha = 0.00842$)			
$^{184}_{82}Pb_{102}$ 701.5 *5* keV ($\alpha = 0.01366$)			
$^{186}_{82}Pb_{104}$ 662.4 *10* keV ($\alpha = 0.0154$)			
$^{188}_{82}Pb_{106}$ 723.9 *2* keV ($\alpha = 0.01278$)			
$^{190}_{82}Pb_{108}$ 773.8 *5* keV ($\alpha = 0.01112$)			
$^{192}_{82}Pb_{110}$ 853.6 *3* keV ($\alpha = 0.00911$)			
$^{194}_{82}Pb_{112}$ 965.35 *10* keV ($\alpha = 0.00714$)			
$^{196}_{82}Pb_{114}$ 1049.20 *9* keV ($\alpha = 0.00607$)			
$^{198}_{82}Pb_{116}$ 1063.50 *20* keV ($\alpha = 0.00591$)			
$^{200}_{82}Pb_{118}$ 1026.62 *15* keV ($\alpha = 0.00633$)			
$^{202}_{82}Pb_{120}$ 960.66 *4* keV ($\alpha = 0.00720$)			
$^{204}_{82}Pb_{122}$ 899.171 *24* keV ($\alpha = 0.00821$)			
0.1620 *40*	4.25 *11*	ADOPTED VALUE	
0.146 *15*	4.77 *49*	Coul Ex (x,x$'\gamma$)	1971Gr31
0.151 *15*	4.61 *46*	Coul Ex (x,x$'\gamma$)	1972Ha59
0.166 *9*	4.16 *23*	Coul Ex (x,x$'\gamma$)	1974Ol02
0.1660 *20*	4.15 *5*	Coul Ex (x,x$'$)	1978Jo04
0.174 *18*	4.00 *41*	Electron Scatt	1984Pa02
$^{206}_{82}Pb_{124}$ 803.10 *5* keV ($\alpha = 0.01030$)			
0.1000 *20*	12.10 *25*	ADOPTED VALUE	
0.125 *35*	10.5 *29*	Coul Ex (x,x$'\gamma$)	1955St57
0.13 *5*	10.9 *42*	Coul Ex (x,x$'\gamma$)	1962Na06
0.108 *10*	11.3 *11*	Coul Ex (x,x$'\gamma$)	1966Hr01
0.092 *6*	13.2 *8*	Doppler Shift	1970Qu02
0.103 *8*	11.8 *9*	Coul Ex (x,x$'\gamma$)	1971Gr31
0.095 *5*	12.8 *7*	Coul Ex (x,x$'\gamma$)	1972Ha59
0.1030 *10*	11.74 *12*	Coul Ex (x,x$'$)	1978Jo04
0.096 *10*	12.8 *13*	Electron Scatt	1984Pa02
$^{208}_{82}Pb_{126}$ 4085.4 *3* keV			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
0.300 *30*	0.00121 *12*	ADOPTED VALUE	
0.270 *28*	0.00134 *14*	Reson Fluor	1974Sw05
0.33 *14*	0.0013 *5*	Reson Fluor	1977Co10
0.39 *8*	0.00097 *21*	Reson Fluor	1980Ch22
0.300 *20*	0.00120 *8*	Electron Scatt	1968Zi02
0.318 *16*	0.00114 *6*	Electron Scatt	1982He03
0.318 *32*	0.00114 *12*	Electron Scatt	1984Pa02
$^{210}_{82}$Pb$_{128}$ 799.7 *1* keV ($\alpha = 0.01039$)			
0.051 *15*	27 *8*	Coul Ex (x,x′)	1971El03
$^{212}_{82}$Pb$_{130}$ 804.9 *5* keV ($\alpha = 0.01025$)			
$^{214}_{82}$Pb$_{132}$ 836 *2* keV ($\alpha = 0.00949$)			
$^{192}_{84}$Po$_{108}$ 262.0 *20* keV ($\alpha = 0.190$)			
$^{194}_{84}$Po$_{110}$ 318.6 *2* keV ($\alpha = 0.1048$)			
$^{196}_{84}$Po$_{112}$ 463.12 *9* keV ($\alpha = 0.0385$)			
$^{198}_{84}$Po$_{114}$ 605.0 *1* keV ($\alpha = 0.0206$)			
$^{200}_{84}$Po$_{116}$ 665.90 *10* keV ($\alpha = 0.0168$)			
$^{202}_{84}$Po$_{118}$ 677.30 *20* keV ($\alpha = 0.0162$)			
$^{204}_{84}$Po$_{120}$ 684.342 *10* keV ($\alpha = 0.0158$)			
$^{206}_{84}$Po$_{122}$ 700.66 *3* keV ($\alpha = 0.0150$)			
$^{208}_{84}$Po$_{124}$ 686.528 *20* keV ($\alpha = 0.0157$)			
$^{210}_{84}$Po$_{126}$ 1181.40 *2* keV ($\alpha = 0.00510$)			
0.0200 *40*	9.2 *18*	Coul Ex (x,x′)	1973El06
$^{212}_{84}$Po$_{128}$ 727.330 *9* keV ($\alpha = 0.01390$)			
$^{214}_{84}$Po$_{130}$ 609.316 *7* keV ($\alpha = 0.0203$)			
$^{216}_{84}$Po$_{132}$ 549.76 *4* keV ($\alpha = 0.0256$)			
$^{218}_{84}$Po$_{134}$ 511 *2* keV ($\alpha = 0.0303$)			
$^{198}_{86}$Rn$_{112}$ 339.0 *20* keV ($\alpha = 0.0960$)			
$^{200}_{86}$Rn$_{114}$ 432.9 *2* keV ($\alpha = 0.0499$)			
$^{202}_{86}$Rn$_{116}$ 504.1 *3* keV ($\alpha = 0.0344$)			
$^{204}_{86}$Rn$_{118}$ 542.9 *3* keV ($\alpha = 0.0289$)			
$^{206}_{86}$Rn$_{120}$ 575.3 *1* keV ($\alpha = 0.0254$)			
$^{208}_{86}$Rn$_{122}$ 635.8 *2* keV ($\alpha = 0.0204$)			
$^{210}_{86}$Rn$_{124}$ 643.8 *1* keV ($\alpha = 0.0198$)			
$^{212}_{86}$Rn$_{126}$ 1273.8 *2* keV ($\alpha = 0.00515$)			
$^{214}_{86}$Rn$_{128}$ 694.7 *10* keV ($\alpha = 0.0168$)			
$^{216}_{86}$Rn$_{130}$ 461.9 *2* keV ($\alpha = 0.0424$)			
$^{218}_{86}$Rn$_{132}$ 324.22 *5* keV ($\alpha = 0.1090$)			
$^{220}_{86}$Rn$_{134}$ 240.986 *6* keV ($\alpha = 0.274$)			
1.86 *7*	212 *7*	ADOPTED VALUE	
1.83 *13*	216 *14*	Delayed Coinc	1960Be25
1.89 *7*	209 *7*	Delayed Coinc	1965Ne03
$^{222}_{86}$Rn$_{136}$ 186.211 *13* keV ($\alpha = 0.672$)			
2.37 *16*	462 *29*	ADOPTED VALUE	
2.37 *16*	462 *29*	Delayed Coinc	1960Be25
3.2 *12*	400 *150*	Delayed Coinc	1961Fo08
$^{206}_{88}$Ra$_{118}$ 474.3 *10* keV ($\alpha = 0.0279$)			
$^{208}_{88}$Ra$_{120}$ 520.2 *10* keV ($\alpha = 0.0351$)			
$^{210}_{88}$Ra$_{122}$ 603.3 *10* keV ($\alpha = 0.0251$)			
$^{212}_{88}$Ra$_{124}$ 629.3 *5* keV ($\alpha = 0.0229$)			
$^{214}_{88}$Ra$_{126}$ 1382.4 *10* keV ($\alpha = 0.00491$)			
$^{216}_{88}$Ra$_{128}$ 688.2 *2* keV ($\alpha = 0.0190$)			
$^{218}_{88}$Ra$_{130}$ 389.1 *2* keV ($\alpha = 0.0722$)			
1.10 *20*	40 *7*	Recoil Dist	1984EnZY
$^{220}_{88}$Ra$_{132}$ 178.47 *12* keV ($\alpha = 0.886$)			
$^{222}_{88}$Ra$_{134}$ 111.12 *2* keV ($\alpha = 6.11$)			
4.54 *39*	750 *60*	Delayed Coinc	1960Be25
$^{224}_{88}$Ra$_{136}$ 84.373 *3* keV ($\alpha = 21.2$)			
3.99 *15*	1080 *30*	ADOPTED VALUE	
4.4 *7*	1000 *150*	Delayed Coinc	1959Si74
4.2 *9*	1080 *220*	Delayed Coinc	1959Si74
3.93 *19*	1096 *43*	Delayed Coinc	1960Be25
3.77 *36*	1150 *100*	Delayed Coinc	1961Fo08
4.01 *9*	1073 *14*	Delayed Coinc	1965Ne03

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
3.99 *14*	1079 *29*	Delayed Coinc	1970To08
$^{226}_{88}Ra_{138}$ 67.67 *1* keV ($\alpha = 60.6$)			
5.15 *14*	907 *34*	ADOPTED VALUE	
5.2 *6*	910 *100*	Delayed Coinc	1958Va04
5.14 *21*	909 *29*	Delayed Coinc	1960Be25
6.8 *13*	710 *130*	Delayed Coinc	1960Un02
5.3 *6*	900 *100*	Delayed Coinc	1961Fo08
5.15 *14*	907 *34*	Coul Ex (x,x′)	1993Wo05
$^{228}_{88}Ra_{140}$ 63.823 *20* keV ($\alpha = 80.2$)			
5.99 *28*	793 *29*	ADOPTED VALUE	
6.0 *5*	790 *60*	Delayed Coinc	1960Be25
5.99 *28*	793 *29*	Delayed Coinc	1998Gu09
$^{230}_{88}Ra_{142}$ 57.4 *1* keV ($\alpha = 133.8$)			
$^{216}_{90}Th_{126}$ 1478 *2* keV ($\alpha = 0.00483$)			
$^{218}_{90}Th_{128}$ 689.6 *6* keV ($\alpha = 0.0209$)			
$^{220}_{90}Th_{130}$ 373.3 *3* keV ($\alpha = 0.0892$)			
$^{222}_{90}Th_{132}$ 183.3 *10* keV ($\alpha = 0.907$)			
3.01 *32*	346 *29*	Recoil Dist	1985Bo32
$^{224}_{90}Th_{134}$ 98.1 *3* keV ($\alpha = 12.31$)			
$^{226}_{90}Th_{136}$ 72.20 *4* keV ($\alpha = 52.4$)			
6.85 *42*	570 *29*	Delayed Coinc	1960Be25
$^{228}_{90}Th_{138}$ 57.759 *4* keV ($\alpha = 153$)			
7.06 *24*	584 *14*	ADOPTED VALUE	
7.2 *6*	577 *43*	Delayed Coinc	1960Be25
7.11 *25*	580 *14*	Delayed Coinc	1965Ne03
6.99 *24*	590 *14*	Delayed Coinc	1970To08
$^{230}_{90}Th_{140}$ 53.20 *2* keV ($\alpha = 228$)			
8.04 *10*	521 *12*	ADOPTED VALUE	
7.9 *5*	534 *29*	Delayed Coinc	1960Be25
11.1 *17*	390 *60*	Coul Ex Ce(L)	1961Re02
8.21 *29*	511 *13*	Delayed Coinc	1965Ne03
8.01 *11*	523 *12*	Coul Ex (x,x′)	1971Fo17
8.06 *11*	520 *12*	Coul Ex (x,x′)	1973Be44
$^{232}_{90}Th_{142}$ 49.369 *9* keV ($\alpha = 327$)			
9.28 *10*	457 *10*	ADOPTED VALUE	
8.54 *46*	498 *22*	Delayed Coinc	1960Be25
6.3 *12*	700 *140*	Coul Ex (x,x′γ)	1960Mc13
11.5 *17*	380 *60*	Coul Ex Ce(L)	1961Re02
9.8 *6*	435 *31*	Coul Ex (x,x′)	1961Sk01
9.40 *20*	452 *14*	Coul Ex (x,x′)	1971Fo17
9.1 *6*	468 *36*	Coul Ex (x,x′)	1972El08
9.21 *9*	461 *9*	Coul Ex (x,x′)	1973Be44
9.21 *18*	461 *14*	Coul Ex (x,x′)	1974Ba43
9.2 *6*	462 *35*	Mossbauer	1973Ca29
$^{234}_{90}Th_{144}$ 49.55 *6* keV ($\alpha = 321$)			
8.0 *7*	534 *43*	Delayed Coinc	1960Be25
$^{226}_{92}U_{134}$ 80.5 *10* keV ($\alpha \sim 36.9$)			
$^{228}_{92}U_{136}$ 59 *10* keV ($\alpha \sim 163$)			
$^{230}_{92}U_{138}$ 51.72 *4* keV ($\alpha = 307$)			
9.7 *12*	375 *43*	Delayed Coinc	1960Be25
$^{232}_{92}U_{140}$ 47.572 *7* keV ($\alpha = 461$)			
10.0 *10*	366 *29*	Delayed Coinc	1960Be25
$^{234}_{92}U_{142}$ 43.498 *1* keV ($\alpha = 712$)			
10.66 *20*	345 *10*	ADOPTED VALUE	
9.6 *8*	384 *29*	Delayed Coinc	1960Be25
11.4 *17*	330 *50*	Coul Ex Ce(L)	1961Re02
9.7 *8*	382 *35*	Coul Ex (x,x′)	1965Fr11
10.12 *38*	364 *10*	Delayed Coinc	1970To08
10.33 *26*	356 *13*	Coul Ex (x,x′)	1971Fo17
10.90 *10*	337 *6*	Coul Ex (x,x′)	1973Be44
$^{236}_{92}U_{144}$ 45.242 *3* keV ($\alpha = 588$)			
11.61 *15*	315 *7*	ADOPTED VALUE	
11.0 *11*	335 *29*	Delayed Coinc	1960Be25
13.1 *20*	286 *46*	Coul Ex Ce(L)	1961Re02
11.2 *21*	340 *70*	Coul Ex (x,x′)	1965Fr11
10.79 *38*	339 *9*	Delayed Coinc	1970To08
11.62 *23*	315 *9*	Coul Ex (x,x′)	1971Fo17
11.60 *15*	315 *7*	Coul Ex (x,x′)	1973Be44
$^{238}_{92}U_{146}$ 44.91 *3* keV ($\alpha = 609$)			
12.09 *20*	303 *8*	ADOPTED VALUE	
11.4 *11*	325 *29*	Delayed Coinc	1960Be25
13.2 *20*	284 *46*	Coul Ex Ce(L)	1961Re02
12.7 *7*	289 *19*	Coul Ex (x,x′)	1961Sk01
11.70 *15*	313 *7*	Coul Ex (x,x′)	1971Fo17
12.30 *15*	298 *7*	Coul Ex (x,x′)	1973Be44
12.7 *17*	293 *42*	Coul Ex (x,x′)	1974ThZG
$^{240}_{92}U_{148}$ 45 *1* keV ($\alpha \sim 603$)			
$^{236}_{94}Pu_{142}$ 44.63 *10* keV ($\alpha = 740$)			

TABLE II. Experimental Data on $B(E2)\uparrow$ Values

See page 14 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{238}_{94}Pu_{144}$ 44.08 *3* keV ($\alpha = 785$)			
12.61 *17*	247 *6*	ADOPTED VALUE	
11.9 *11*	264 *22*	Delayed Coinc	1960Be25
12.22 *47*	255 *7*	Delayed Coinc	1970To08
12.58 *35*	248 *9*	Coul Ex (x,x′)	1971Fo17
12.63 *17*	247 *6*	Coul Ex (x,x′)	1973Be44
$^{240}_{94}Pu_{146}$ 42.824 *8* keV ($\alpha = 904$)			
13.02 *30*	241 *8*	ADOPTED VALUE	
12.6 *12*	250 *22*	Delayed Coinc	1960Be25
13.8 *19*	231 *29*	Doppler Shift	1964No01
12.90 *30*	243 *8*	Coul Ex (x,x′)	1965Fr11
13.3 *5*	237 *7*	Delayed Coinc	1970To08
12.57 *35*	249 *9*	Coul Ex (x,x′)	1971Fo17
13.33 *18*	235 *6*	Coul Ex (x,x′)	1973Be44
$^{242}_{94}Pu_{148}$ 44.54 *2* keV ($\alpha = 747$)			
13.40 *16*	232 *5*	ADOPTED VALUE	
13.9 *12*	226 *22*	Coul Ex (x,x′)	1965Fr11
13.26 *35*	235 *9*	Coul Ex (x,x′)	1971Fo17
16.5 *14*	190 *18*	Coul Ex (x,x′)	1972El08
13.47 *18*	231 *5*	Coul Ex (x,x′)	1973Be44
$^{244}_{94}Pu_{150}$ 46 *2* keV ($\alpha \sim 638$)			
13.68 *16*	226 *6*	ADOPTED VALUE	
13.83 *37*	224 *10*	Coul Ex (x,x′)	1971Fo17
13.61 *18*	228 *7*	Coul Ex (x,x′)	1973Be44
$^{246}_{94}Pu_{152}$ 44.2 *4* keV ($\alpha = 775$)			
$^{238}_{96}Cm_{142}$ 35 *8* keV ($\alpha \sim 2840$)			
$^{240}_{96}Cm_{144}$ 38 *5* keV ($\alpha \sim 1900$)			
14.3 *6*	190 *13*	Recoil Dist	1978Ul01
$^{242}_{96}Cm_{146}$ 42.13 *1* keV ($\alpha = 1153$)			
$^{244}_{96}Cm_{148}$ 42.965 *10* keV ($\alpha = 1031$)			
14.67 *17*	181.1 *39*	ADOPTED VALUE	
19.3 *12*	140 *7*	Delayed Coinc	1962Ch19
14.86 *35*	182 *6*	Coul Ex (x,x′)	1971Fo17
14.58 *19*	185.2 *43*	Coul Ex (x,x′)	1973Be44
$^{246}_{96}Cm_{150}$ 42.852 *5* keV ($\alpha = 1045$)			
14.94 *19*	180.8 *41*	ADOPTED VALUE	
15.03 *45*	180 *7*	Coul Ex (x,x′)	1971Fo17
14.94 *19*	180.8 *41*	Coul Ex (x,x′)	1973Be44
$^{248}_{96}Cm_{152}$ 43.38 *3* keV ($\alpha = 984$)			
14.99 *19*	177.0 *40*	ADOPTED VALUE	
14.9 *13*	182 *14*	Delayed Coinc	1970To08
15.0 *6*	180 *8*	Coul Ex (x,x′)	1971Fo17
14.99 *19*	179.9 *41*	Coul Ex (x,x′)	1973Be44
13.7 *8*	194 *11*	Coul Ex (x,x′γ)	1986Cz02
$^{250}_{96}Cm_{154}$ 43 *5* keV ($\alpha \sim 1044$)			
$^{244}_{98}Cf_{146}$ 40 *2* keV ($\alpha \sim 1750$)			
$^{246}_{98}Cf_{148}$			
$^{248}_{98}Cf_{150}$ 41.53 *6* keV ($\alpha = 1458$)			
$^{250}_{98}Cf_{152}$ 42.722 *5* keV ($\alpha = 1250$)			
16.0 *16*	145 *16*	Coul Ex (x,x′)	1980Ah01
$^{252}_{98}Cf_{154}$ 45.72 *5* keV ($\alpha = 900$)			
16.7 *11*	136 *10*	Coul Ex (x,x′)	1971Fo17
$^{248}_{100}Fm_{148}$ 44 *8* keV ($\alpha \sim 1303$)			
$^{250}_{100}Fm_{150}$ 44 *5* keV ($\alpha \sim 1302$)			
$^{252}_{100}Fm_{152}$ 46.6 *12* keV ($\alpha \sim 987$)			
$^{254}_{100}Fm_{154}$ 44.988 *10* keV ($\alpha = 1170$)			
$^{256}_{100}Fm_{156}$ 48.1 *10* keV ($\alpha \sim 847$)			

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	*E*(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
${}^{4}_{2}He_{2}$	27420		0.000149 *26*						sph.		
${}^{6}_{2}He_{4}$	1797		0.00173 *30*						sph.		
${}^{8}_{2}He_{6}$	3590		0.00072 *13*						sph.		
${}^{10}_{2}He_{8}$	3240		0.00068 *13*								
${}^{6}_{4}Be_{2}$	1670		0.0074 *13*						sph.		
${}^{8}_{4}Be_{4}$	3040		0.0034 *6*						0.003		
${}^{10}_{4}Be_{6}$	3368	0.0053 *6*	0.00263 *46*						sph.		
${}^{12}_{4}Be_{8}$	2102		0.0037 *6*						sph.		
${}^{14}_{4}Be_{10}$	1590		0.0044 *8*						0.003		
${}^{10}_{6}C_{4}$	3353	0.0064 *10*	0.0059 *10*						sph.		
${}^{12}_{6}C_{6}$	4438	0.00397 *33*	0.0040 *7*						sph.		
${}^{14}_{6}C_{8}$	7012	0.00187 *25*	0.00227 *40*						sph.		
${}^{16}_{6}C_{10}$	1766		0.0082 *14*						0.001		
${}^{18}_{6}C_{12}$	1620		0.0083 *15*						0.002		
${}^{14}_{8}O_{6}$	6590		0.0043 *7*						sph.		
${}^{16}_{8}O_{8}$	6917	0.00406 *38*	0.0037 *7*		sph.				sph.	sph.	
${}^{18}_{8}O_{10}$	1982	0.00451 *20*	0.0121 *21*		sph.				sph.	0.001	
${}^{20}_{8}O_{12}$	1673	0.00281 *20*	0.0133 *23*		sph.				sph.	0.002	
${}^{22}_{8}O_{14}$	3190	0.0021 *8*	0.0066 *11*		sph.				sph.	0.001	
${}^{24}_{8}O_{16}$					sph.				sph.	sph.	
${}^{26}_{8}O_{18}$					sph.				sph.	sph.	
${}^{12}_{10}Ne_{2}$										sph.	
${}^{14}_{10}Ne_{4}$										sph.	
${}^{16}_{10}Ne_{6}$	1690		0.0239 *43*				sph.		0.008	sph.	
${}^{18}_{10}Ne_{8}$	1887	0.0269 *26*	0.0198 *35*		0.001		sph.		sph.	0.003	
${}^{20}_{10}Ne_{10}$	1633	0.0340 *30*	0.0213 *37*		0.021		0.003		0.016	0.010	
${}^{22}_{10}Ne_{12}$	1274	0.0230 *10*	0.0256 *45*		0.015		0.012		0.017	0.011	
${}^{24}_{10}Ne_{14}$	1981	0.017 *6*	0.0156 *27*		0.004		0.004		0.003	0.004	
${}^{26}_{10}Ne_{16}$	2018	0.0228 *41*	0.0145 *25*		sph.		sph.		sph.	0.001	
${}^{28}_{10}Ne_{18}$	1310	0.027 *14*	0.0212 *37*		0.003		sph.		0.002	0.002	
${}^{30}_{10}Ne_{20}$					sph.		sph.		sph.	sph.	
${}^{32}_{10}Ne_{22}$					0.015		sph.		0.018	0.015	
${}^{18}_{12}Mg_{6}$							0.017		0.022	0.015	
${}^{20}_{12}Mg_{8}$					0.002		sph.		sph.	0.007	
${}^{22}_{12}Mg_{10}$	1246	0.037 *13*	0.038 *7*		0.021		0.022		0.028	0.024	
${}^{24}_{12}Mg_{12}$	1368	0.0432 *11*	0.032 *6*		0.019		0.027		0.030	0.031	
${}^{26}_{12}Mg_{14}$	1808	0.0305 *13*	0.0233 *41*		0.013		0.016		0.015	0.011	
${}^{28}_{12}Mg_{16}$	1473	0.035 *5*	0.0272 *47*		0.015		0.012		0.017	0.003	
${}^{30}_{12}Mg_{18}$	1482	0.0295 *26*	0.0258 *45*		0.005		0.007		0.015	0.004	
${}^{32}_{12}Mg_{20}$	885	0.039 *7*	0.041 *7*		sph.		sph.		sph.	0.019	
${}^{34}_{12}Mg_{22}$	670		0.053 *9*		0.045		0.010		0.034	0.030	
${}^{36}_{12}Mg_{24}$					0.032		0.029	0.036	0.031	0.025	

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{38}_{12}$Mg$_{26}$					0.025		0.033	0.042	0.030	0.025	
$^{22}_{14}$Si$_{8}$					sph.		sph.		sph.	0.008	
$^{24}_{14}$Si$_{10}$					0.010		0.011		0.010	0.015	
$^{26}_{14}$Si$_{12}$	1795	0.0356 *34*	0.032 *6*		0.024		0.021		0.013	0.017	
$^{28}_{14}$Si$_{14}$	1779	0.0326 *12*	0.031 *5*		0.047		0.019		0.017	0.021	
$^{30}_{14}$Si$_{16}$	2235	0.0215 *10*	0.0233 *41*		sph.		0.008		0.002	0.010	
$^{32}_{14}$Si$_{18}$	1941	0.0113 *33*	0.0257 *45*		sph.		0.004		0.008	0.006	
$^{34}_{14}$Si$_{20}$	3327	0.0085 *33*	0.0144 *25*		sph.		sph.		sph.	sph.	
$^{36}_{14}$Si$_{22}$	1399	0.019 *6*	0.033 *6*		sph.		sph.	0.011	sph.	0.011	
$^{38}_{14}$Si$_{24}$	1084	0.019 *7*	0.041 *7*		0.023		0.018	0.026	0.004	0.020	
$^{40}_{14}$Si$_{26}$					0.093		0.021	0.026	0.009	0.021	
$^{42}_{14}$Si$_{28}$					0.038		0.036	0.035	0.016	0.024	
$^{26}_{16}$S$_{10}$					sph.		sph.		sph.	0.005	
$^{28}_{16}$S$_{12}$					0.030		0.019		0.025	0.009	
$^{30}_{16}$S$_{14}$	2210	0.0324 *41*	0.031 *5*		sph.		0.012		0.003	0.013	
$^{32}_{16}$S$_{16}$	2230	0.0300 *13*	0.029 *5*		sph.		0.011		0.017	0.004	
$^{34}_{16}$S$_{18}$	2127	0.0212 *12*	0.029 *5*		sph.		0.003		0.010	0.003	
$^{36}_{16}$S$_{20}$	3290	0.0104 *28*	0.0183 *32*		sph.		sph.	sph.	sph.	sph.	
$^{38}_{16}$S$_{22}$	1292	0.0235 *30*	0.045 *8*		sph.		0.001	0.011	sph.	0.010	
$^{40}_{16}$S$_{24}$	900	0.0334 *36*	0.062 *11*		0.032		0.023	0.035	0.024	0.024	
$^{42}_{16}$S$_{26}$	890	0.040 *6*	0.061 *11*		0.029		0.027	0.032	0.025	0.019	
$^{44}_{16}$S$_{28}$	1315	0.031 *9*	0.040 *7*		sph.		0.046	0.028	0.018	0.017	
$^{46}_{16}$S$_{30}$					0.026		0.046	0.023	0.018	0.011	
$^{48}_{16}$S$_{32}$					0.032		0.019	0.013	0.015	0.004	
$^{30}_{18}$Ar$_{12}$					0.011		0.005		0.023	0.009	
$^{32}_{18}$Ar$_{14}$					0.017		0.007		0.014	0.012	
$^{34}_{18}$Ar$_{16}$	2090	0.0240 *40*	0.038 *7*		sph.		0.011		0.015	0.004	
$^{36}_{18}$Ar$_{18}$	1970	0.0300 *30*	0.039 *7*		sph.		0.015	0.019	0.019	sph.	
$^{38}_{18}$Ar$_{20}$	2167	0.0130 *10*	0.034 *6*		sph.		sph.	sph.	sph.	sph.	
$^{40}_{18}$Ar$_{22}$	1460	0.0330 *40*	0.049 *8*		sph.		sph.	0.011	sph.	0.002	
$^{42}_{18}$Ar$_{24}$	1208	0.043 *10*	0.057 *10*		sph.		0.008	0.021	0.009	0.011	
$^{44}_{18}$Ar$_{26}$	1144	0.0345 *41*	0.058 *10*		sph.		0.011	0.025	0.012	0.012	
$^{46}_{18}$Ar$_{28}$	1550	0.0196 *39*	0.042 *7*		sph.		0.010	0.030	0.013	0.016	
$^{48}_{18}$Ar$_{30}$					0.021		0.017	0.031	sph.	0.010	
$^{50}_{18}$Ar$_{32}$					0.029		0.022	0.017	sph.	sph.	
$^{34}_{20}$Ca$_{14}$					sph.	0.015	sph.		sph.	sph.	
$^{36}_{20}$Ca$_{16}$					sph.	0.002	sph.	sph.	sph.	sph.	
$^{38}_{20}$Ca$_{18}$	2206	0.0096 *21*	0.041 *7*		sph.	0.001	sph.	sph.	sph.	sph.	
$^{40}_{20}$Ca$_{20}$	3904	0.0099 *17*	0.0225 *39*		sph.	sph.	sph.	sph.	sph.	sph.	0.156
$^{42}_{20}$Ca$_{22}$	1524	0.0420 *30*	0.056 *10*		sph.	sph.	sph.	sph.	sph.	sph.	0.017
$^{44}_{20}$Ca$_{24}$	1157	0.0470 *20*	0.071 *12*		sph.	sph.	sph.	0.002	sph.	0.025	0.017
$^{46}_{20}$Ca$_{26}$	1346	0.0182 *13*	0.059 *10*		sph.	sph.	sph.	0.005	sph.	0.020	0.016
$^{48}_{20}$Ca$_{28}$	3831	0.0095 *32*	0.0203 *35*		sph.	sph.	sph.	sph.	sph.	0.012	0.015

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{50}_{20}$Ca$_{30}$	1026		0.074 *13*		sph.	sph.	sph.	sph.	sph.	sph.	0.014
$^{52}_{20}$Ca$_{32}$	2563		0.029 *5*		sph.	sph.	sph.	sph.	sph.	sph.	0.015
$^{54}_{20}$Ca$_{34}$					sph.	sph.	sph.	sph.	sph.	sph.	0.016
$^{56}_{20}$Ca$_{36}$					sph.	0.001	sph.	sph.		sph.	0.018
$^{38}_{22}$Ti$_{16}$					sph.	0.002	sph.	0.021	0.023	0.029	
$^{40}_{22}$Ti$_{18}$					sph.	sph.	sph.	0.018	sph.	0.010	
$^{42}_{22}$Ti$_{20}$	1554	0.087 *25*	0.066 *12*		sph.	sph.	sph.	sph.	sph.	sph.	
$^{44}_{22}$Ti$_{22}$	1082	0.065 *16*	0.092 *16*		sph.	sph.	sph.	0.028	sph.	0.011	0.028
$^{46}_{22}$Ti$_{24}$	889	0.095 *5*	0.109 *19*		sph.	sph.	0.015	0.060	sph.	0.055	0.031
$^{48}_{22}$Ti$_{26}$	983	0.0720 *40*	0.096 *17*		sph.	sph.	sph.	0.034	sph.	0.033	0.026
$^{50}_{22}$Ti$_{28}$	1553	0.0290 *40*	0.059 *10*		sph.	sph.	sph.	0.007	sph.	0.004	0.017
$^{52}_{22}$Ti$_{30}$	1049		0.085 *15*		sph.	sph.	sph.	0.024	sph.	sph.	0.025
$^{54}_{22}$Ti$_{32}$					sph.	sph.	sph.	sph.	sph.	sph.	0.027
$^{56}_{22}$Ti$_{34}$					0.024	sph.	0.003	sph.	sph.	sph.	0.029
$^{44}_{24}$Cr$_{20}$					sph.	sph.	sph.	0.028	sph.	sph.	
$^{46}_{24}$Cr$_{22}$					sph.	sph.	sph.	0.085	sph.	0.075	
$^{48}_{24}$Cr$_{24}$	752	0.136 *21*	0.149 *26*		sph.	0.036	0.086	0.109	0.071	0.082	0.072
$^{50}_{24}$Cr$_{26}$	783	0.108 *6*	0.139 *24*		sph.	0.027	0.069	0.090	0.046	0.080	0.059
$^{52}_{24}$Cr$_{28}$	1434	0.0660 *30*	0.074 *13*		sph.	0.004	sph.	0.030	sph.	0.042	0.027
$^{54}_{24}$Cr$_{30}$	834	0.0870 *40*	0.124 *22*		0.056	sph.	0.044	0.051	0.024	0.039	0.040
$^{56}_{24}$Cr$_{32}$	1006		0.100 *17*		0.062	0.032	0.062	0.028	0.043	0.014	0.051
$^{58}_{24}$Cr$_{34}$					0.066	0.030	0.057	0.038	0.004	0.017	0.062
$^{60}_{24}$Cr$_{36}$					0.057	0.026	0.035	0.054	sph.	sph.	0.064
$^{46}_{26}$Fe$_{20}$					sph.	sph.	sph.	0.028	sph.	0.013	
$^{48}_{26}$Fe$_{22}$					sph.	sph.	0.013	0.083	sph.	0.047	
$^{50}_{26}$Fe$_{24}$	810		0.158 *32*		sph.	0.030	0.085	0.106	0.058	0.078	
$^{52}_{26}$Fe$_{26}$	849		0.147 *26*		sph.	0.012	0.070	0.107	0.048	0.080	0.071
$^{54}_{26}$Fe$_{28}$	1408	0.062 *5*	0.086 *15*		sph.	sph.	sph.	0.035	sph.	0.044	0.028
$^{56}_{26}$Fe$_{30}$	846	0.0980 *40*	0.140 *24*		sph.	sph.	0.015	0.071	0.030	0.052	0.039
$^{58}_{26}$Fe$_{32}$	810	0.1200 *40*	0.143 *25*		0.079	0.024	0.075	0.045	0.057	0.051	0.068
$^{60}_{26}$Fe$_{34}$	823	0.096 *18*	0.137 *24*		0.088	0.040	0.078	0.069	0.054	0.038	0.079
$^{62}_{26}$Fe$_{36}$	876		0.126 *22*		0.083	0.025	0.052	0.072	sph.	0.029	0.052
$^{64}_{26}$Fe$_{38}$					0.014	0.001	sph.	0.142	sph.	sph.	0.085
$^{66}_{26}$Fe$_{40}$					0.002	sph.	sph.	0.194	sph.	sph.	0.062
$^{52}_{28}$Ni$_{24}$					sph.	sph.	sph.	0.034	sph.	0.027	
$^{54}_{28}$Ni$_{26}$					sph.	sph.	sph.	0.046	sph.	0.056	
$^{56}_{28}$Ni$_{28}$	2700	0.060 *12*	0.051 *9*	sph.	sph.	sph.	sph.	0.048	sph.	0.034	0.023
$^{58}_{28}$Ni$_{30}$	1454	0.0695 *20*	0.092 *16*	0.016	sph.	0.001	sph.	0.050	sph.	0.052	0.028
$^{60}_{28}$Ni$_{32}$	1332	0.0933 *15*	0.098 *17*	0.036	0.002	sph.	0.012	0.046	sph.	0.050	0.031
$^{62}_{28}$Ni$_{34}$	1172	0.0890 *25*	0.109 *19*	0.054	0.020	0.010	0.014	0.058	sph.	0.048	0.033
$^{64}_{28}$Ni$_{36}$	1345	0.076 *8*	0.093 *16*	0.068	0.017	0.001	0.013	0.060	sph.	0.050	0.034
$^{66}_{28}$Ni$_{38}$	1425	0.062 *9*	0.086 *15*	0.079	0.002	sph.	sph.	0.032	sph.	0.001	0.032
$^{68}_{28}$Ni$_{40}$	2033	0.026 *6*	0.059 *10*	0.084	0.001	sph.	sph.	sph.	sph.	0.001	0.031

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	*E*(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{70}_{28}$Ni$_{42}$	1259		0.094 *16*	0.065	0.002	sph.	sph.	sph.	sph.	sph.	0.030
$^{72}_{28}$Ni$_{44}$				0.040	0.008	0.001	sph.	0.007	sph.	sph.	0.030
$^{74}_{28}$Ni$_{46}$				0.020	0.008	sph.	sph.	0.020	sph.	0.007	0.028
$^{56}_{30}$Zn$_{26}$					0.088	sph.	0.068	0.094	0.046	0.073	
$^{58}_{30}$Zn$_{28}$				0.036	sph.	sph.	sph.	0.057	sph.	0.081	
$^{60}_{30}$Zn$_{30}$	1004		0.150 *26*	0.104	0.099	sph.	0.092	0.092	0.073	0.041	0.057
$^{62}_{30}$Zn$_{32}$	954	0.124 *9*	0.154 *27*	0.151	0.133	0.030	0.119	0.075	0.108	0.069	0.058
$^{64}_{30}$Zn$_{34}$	991	0.160 *15*	0.146 *25*	0.189	0.144	0.060	0.122	0.094	sph.	0.075	0.062
$^{66}_{30}$Zn$_{36}$	1039	0.135 *10*	0.136 *24*	0.216	0.113	0.044	0.086	0.098	sph.	0.078	0.068
$^{68}_{30}$Zn$_{38}$	1077	0.124 *15*	0.129 *22*	0.236	0.061	0.057	0.038	0.075	sph.	0.081	0.066
$^{70}_{30}$Zn$_{40}$	884	0.160 *14*	0.154 *27*	0.246	0.006	sph.	sph.	0.212	sph.	sph.	0.060
$^{72}_{30}$Zn$_{42}$	652		0.204 *36*	0.211	0.009	sph.	sph.	0.205	sph.	0.078	0.057
$^{74}_{30}$Zn$_{44}$	605		0.216 *38*	0.160	0.061	0.042	0.079	0.161	sph.	0.069	0.063
$^{76}_{30}$Zn$_{46}$	598		0.215 *37*	0.115	0.081	0.066	0.101	0.116	sph.	0.068	0.056
$^{78}_{30}$Zn$_{48}$	729		0.173 *30*	0.078	0.030	0.031	0.060	0.103	sph.	sph.	0.037
$^{80}_{30}$Zn$_{50}$				0.037	0.008	sph.	sph.	sph.	sph.	sph.	
$^{82}_{30}$Zn$_{52}$				0.122	0.100	0.049	sph.	0.072	sph.	0.028	
$^{60}_{32}$Ge$_{28}$				0.088	0.030	0.002	0.006	0.068	sph.	0.051	
$^{62}_{32}$Ge$_{30}$				0.189	0.163	0.043	0.147	0.102	0.138	0.078	
$^{64}_{32}$Ge$_{32}$	901		0.182 *32*	0.254	0.162	0.114	0.170	0.122	0.169	0.098	0.077
$^{66}_{32}$Ge$_{34}$	957	0.099 *19*	0.168 *29*	0.305	0.178	0.146	0.184	0.183	0.181	0.138	0.083
$^{68}_{32}$Ge$_{36}$	1015	0.143 *21*	0.155 *27*	0.340	0.207	0.179	0.187	0.191	sph.	0.158	0.096
$^{70}_{32}$Ge$_{38}$	1039	0.1760 *40*	0.149 *26*	0.366	0.164	0.277	0.134	0.181	sph.	0.125	0.103
$^{72}_{32}$Ge$_{40}$	834	0.213 *6*	0.182 *32*	0.380	0.142	0.240	0.139	0.188	sph.	0.116	0.087
$^{74}_{32}$Ge$_{42}$	595	0.300 *6*	0.250 *44*	0.334	0.145	0.126	0.139	0.284	0.006	0.143	0.092
$^{76}_{32}$Ge$_{44}$	562	0.268 *8*	0.260 *45*	0.267	0.089	0.107	0.123	0.199	0.031	0.117	0.087
$^{78}_{32}$Ge$_{46}$	619		0.232 *41*	0.205	0.105	0.102	0.133	0.189	sph.	0.094	0.080
$^{80}_{32}$Ge$_{48}$	659		0.215 *37*	0.152	0.090	0.076	0.100	0.153	sph.	0.067	0.053
$^{82}_{32}$Ge$_{50}$	1348		0.103 *18*	0.089	0.013	0.030	sph.	0.015	0.001	sph.	
$^{84}_{32}$Ge$_{52}$				0.215	0.108	0.080	0.048	0.130	sph.	0.050	
$^{86}_{32}$Ge$_{54}$				0.299	0.156	0.149	0.139	0.147	0.127	0.081	
$^{64}_{34}$Se$_{30}$				0.276	0.180	0.087	0.180	0.217	0.139	0.124	
$^{66}_{34}$Se$_{32}$				0.356	0.218	0.169	0.233	0.226	0.223	0.163	
$^{68}_{34}$Se$_{34}$	854		0.208 *36*	0.419	0.218	0.210	0.263	0.281	0.255	0.191	0.123
$^{70}_{34}$Se$_{36}$	944	0.38 *8*	0.185 *32*	0.462	0.302	0.651	0.298	0.286	sph.	0.195	0.127
$^{72}_{34}$Se$_{38}$	862	0.207 *25*	0.199 *35*	0.494	0.258	0.667	0.270	0.274	sph.	0.186	0.144
$^{74}_{34}$Se$_{40}$	634	0.387 *8*	0.265 *46*	0.510	0.206	0.568	0.209	0.284	0.167	0.186	0.134
$^{76}_{34}$Se$_{42}$	559	0.420 *10*	0.30 *5*	0.455	0.195	0.284	0.214	0.294	0.006	0.433	0.154
$^{78}_{34}$Se$_{44}$	613	0.335 *9*	0.265 *46*	0.373	0.100	0.143	0.142	0.304	0.011	0.130	0.126
$^{80}_{34}$Se$_{46}$	666	0.253 *6*	0.240 *42*	0.296	0.118	0.121	0.149	0.194	sph.	0.103	0.104
$^{82}_{34}$Se$_{48}$	654	0.182 *5*	0.240 *42*	0.229	0.118	0.086	0.103	0.173	sph.	0.088	0.068
$^{84}_{34}$Se$_{50}$	1454		0.106 *19*	0.146	0.014	0.001	sph.	0.057	sph.	sph.	
$^{86}_{34}$Se$_{52}$	704		0.216 *38*	0.309	0.090	0.080	sph.	0.130	0.006	0.059	

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{88}_{34}$Se$_{54}$				0.412	0.195	0.171	0.149	0.143	0.139	0.099	
$^{90}_{34}$Se$_{56}$				0.517	0.288	0.241	0.231	0.190	0.247	0.151	
$^{68}_{36}$Kr$_{32}$				0.446	0.335	0.443	0.287	0.315	sph.	0.277	
$^{70}_{36}$Kr$_{34}$				0.519	0.377	0.753	0.366	0.518	0.319	0.308	
$^{72}_{36}$Kr$_{36}$	709		0.271 *47*	0.569	0.444	0.792	0.478	0.538	sph.	0.338	0.252
$^{74}_{36}$Kr$_{38}$	455	0.84 *10*	0.41 *7*	0.606	0.969	0.829	0.952	0.326	sph.	1.161	0.220
$^{76}_{36}$Kr$_{40}$	423	0.824 *24*	0.44 *8*	0.625	0.992	0.820	1.336	0.330	0.004	0.948	0.221
$^{78}_{36}$Kr$_{42}$	455	0.633 *39*	0.40 *7*	0.562	0.206	0.700	0.234	0.341	0.003	0.896	0.201
$^{80}_{36}$Kr$_{44}$	616	0.370 *21*	0.29 *5*	0.467	0.021	0.193	0.064	0.353	sph.	0.151	0.185
$^{82}_{36}$Kr$_{46}$	776	0.223 *10*	0.227 *40*	0.377	0.029	0.094	0.088	0.200	sph.	0.104	0.125
$^{84}_{36}$Kr$_{48}$	881	0.125 *6*	0.197 *34*	0.298	0.022	0.018	0.035	0.141	sph.	sph.	0.082
$^{86}_{36}$Kr$_{50}$	1564	0.122 *10*	0.109 *19*	0.198	0.017	0.001	sph.	0.009	sph.	0.007	
$^{88}_{36}$Kr$_{52}$	775		0.217 *38*	0.392	0.024	0.024	sph.	0.094	sph.	sph.	
$^{90}_{36}$Kr$_{54}$	707		0.234 *41*	0.513	0.182	0.180	0.110	0.147	sph.	0.084	
$^{92}_{36}$Kr$_{56}$	769		0.212 *37*	0.634	0.375	0.354	0.216	0.240	sph.	0.183	
$^{94}_{36}$Kr$_{58}$	665		0.242 *42*	0.750	0.838	0.804	0.261	0.441	sph.	0.250	
$^{96}_{36}$Kr$_{60}$				0.849	1.102	1.004	0.253	0.499	0.956	0.364	
$^{98}_{36}$Kr$_{62}$				0.904	1.154	1.024	0.240	1.206		1.004	
$^{72}_{38}$Sr$_{34}$				0.612	0.856	0.893	0.443	0.350	sph.	0.351	
$^{74}_{38}$Sr$_{36}$				0.669	1.063	0.957	1.125	1.474	sph.	1.158	
$^{76}_{38}$Sr$_{38}$	260		0.79 *14*	0.711	1.231	1.030	1.259	1.528	sph.	1.250	1.105
$^{78}_{38}$Sr$_{40}$	278	1.08 *15*	0.73 *13*	0.732	1.264	1.068	1.280	1.427	sph.	1.166	1.073
$^{80}_{38}$Sr$_{42}$	385	0.959 *36*	0.52 *9*	0.661	0.017	1.015	0.207	1.253	sph.	1.047	0.214
$^{82}_{38}$Sr$_{44}$	573	0.513 *20*	0.34 *6*	0.554	0.018	0.018	0.023	0.406	sph.	sph.	0.183
$^{84}_{38}$Sr$_{46}$	793	0.289 *44*	0.243 *42*	0.452	0.018	0.001	0.021	0.157	sph.	sph.	0.139
$^{86}_{38}$Sr$_{48}$	1076	0.128 *14*	0.177 *31*	0.362	0.019	0.002	0.002	sph.	sph.	sph.	0.084
$^{88}_{38}$Sr$_{50}$	1836	0.092 *5*	0.102 *18*	0.247	0.014	sph.	sph.	sph.	sph.	sph.	0.056
$^{90}_{38}$Sr$_{52}$	831	0.113 *34*	0.222 *39*	0.469	0.020	sph.	sph.	0.078	sph.	0.053	0.072
$^{92}_{38}$Sr$_{54}$	814	0.114 *48*	0.223 *39*	0.606	0.048	0.011	0.113	0.148	sph.	0.022	0.098
$^{94}_{38}$Sr$_{56}$	836	0.118 *47*	0.214 *37*	0.743	0.566	0.594	0.295	0.233	sph.	0.152	0.147
$^{96}_{38}$Sr$_{58}$	814	0.24 *14*	0.217 *38*	0.874	1.159	1.062	1.469	1.250	0.325	0.276	0.197
$^{98}_{38}$Sr$_{60}$	144	1.282 *39*	1.21 *21*	0.985	1.382	1.206	1.455	1.664	1.372	1.117	0.399
$^{100}_{38}$Sr$_{62}$	129	1.42 *8*	1.33 *23*	1.047	1.457	1.260	1.439	1.557	1.439	1.253	0.452
$^{102}_{38}$Sr$_{64}$	126		1.35 *23*	1.045	1.441	1.270	1.417	1.763	1.427	1.439	0.462
$^{104}_{38}$Sr$_{66}$				1.028	1.338	1.233	1.406	1.585	1.348	1.321	0.479
$^{106}_{38}$Sr$_{68}$				1.009	1.233	1.224	1.443	1.626		1.223	0.497
$^{76}_{40}$Zr$_{36}$				0.748	1.340		1.270	1.527	0.260	1.261	
$^{78}_{40}$Zr$_{38}$				0.794	1.471	1.229	1.491	1.724	sph.	1.395	
$^{80}_{40}$Zr$_{40}$	289		0.76 *13*	0.818	1.517	1.326	1.559	1.725	sph.	1.394	0.274
$^{82}_{40}$Zr$_{42}$	407	0.91 *9*	0.53 *9*	0.740	0.020	1.330	0.277	1.492	sph.	0.839	0.308
$^{84}_{40}$Zr$_{44}$	540	0.438 *25*	0.40 *7*	0.622	0.020	sph.	0.271	0.361	sph.	sph.	0.277
$^{86}_{40}$Zr$_{46}$	751	0.166 *31*	0.280 *49*	0.510	0.021	sph.	sph.	sph.	sph.	sph.	0.132
$^{88}_{40}$Zr$_{48}$	1057	0.26 *8*	0.196 *34*	0.411	0.022	sph.	sph.	sph.	sph.	sph.	0.081

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{90}_{40}$Zr$_{50}$	2186	0.0610 *40*	0.093 *16*	0.284	0.009	sph.	sph.	sph.	sph.	sph.	0.062
$^{92}_{40}$Zr$_{52}$	934	0.083 *6*	0.216 *38*	0.529	0.023	sph.	sph.	sph.	sph.	0.025	0.087
$^{94}_{40}$Zr$_{54}$	918	0.066 *14*	0.216 *38*	0.680	0.033	0.002	0.257	0.003	sph.	0.023	0.118
$^{96}_{40}$Zr$_{56}$	1750	0.055 *22*	0.112 *20*	0.830	0.463	0.566	0.479	0.266	0.241	0.312	0.197
$^{98}_{40}$Zr$_{58}$	1222		0.158 *28*	0.974	1.215	1.123	0.846	0.485	0.312	0.285	0.210
$^{100}_{40}$Zr$_{60}$	212	1.11 *6*	0.90 *16*	1.096	1.535	1.407	1.499	1.530	1.389	1.231	0.382
$^{102}_{40}$Zr$_{62}$	151	1.66 *34*	1.24 *22*	1.164	1.622	1.534	1.575	1.771	1.527	1.327	0.426
$^{104}_{40}$Zr$_{64}$	140		1.32 *23*	1.162	1.722	1.524	1.587	2.004	1.527	1.476	0.442
$^{106}_{40}$Zr$_{66}$				1.144	1.581	1.473	1.592	2.021	1.423	1.464	0.486
$^{108}_{40}$Zr$_{68}$				1.123	1.474	1.443	1.636	1.892		1.341	0.506
$^{80}_{42}$Mo$_{38}$				0.732	1.887		1.607	1.591	sph.	1.501	
$^{82}_{42}$Mo$_{40}$				0.756	0.234	1.511	0.310	0.385	sph.	sph.	
$^{84}_{42}$Mo$_{42}$	443		0.53 *9*	0.679	0.022	sph.	0.346	0.398	sph.	sph.	0.335
$^{86}_{42}$Mo$_{44}$	566		0.41 *7*	0.563	0.023	sph.	sph.	sph.	sph.	sph.	0.298
$^{88}_{42}$Mo$_{46}$	740		0.31 *5*	0.453	0.024	sph.	0.018	0.003	sph.	sph.	0.150
$^{90}_{42}$Mo$_{48}$	947		0.238 *41*	0.357	0.025	sph.	sph.	0.003	sph.	sph.	0.095
$^{92}_{42}$Mo$_{50}$	1509	0.097 *6*	0.147 *26*	0.235	0.011	0.001	sph.	sph.	sph.	sph.	0.070
$^{94}_{42}$Mo$_{52}$	871	0.2030 *40*	0.251 *44*	0.471	0.026	sph.	sph.	0.004	0.003	sph.	0.101
$^{96}_{42}$Mo$_{54}$	778	0.271 *5*	0.277 *48*	0.620	0.064	sph.	0.306	0.004	0.026	0.121	0.150
$^{98}_{42}$Mo$_{56}$	787	0.267 *9*	0.270 *47*	0.769	0.361	0.221	0.347	0.441	0.309	0.254	0.187
$^{100}_{42}$Mo$_{58}$	535	0.516 *10*	0.39 *7*	0.912	0.711	0.588	0.724	0.550	0.525	0.284	0.251
$^{102}_{42}$Mo$_{60}$	296	0.963 *31*	0.70 *12*	1.035	1.471	1.158	1.249	0.565	0.983	0.387	0.356
$^{104}_{42}$Mo$_{62}$	192	1.34 *8*	1.06 *19*	1.103	1.659	1.643	1.444	1.746	1.219	1.319	0.430
$^{106}_{42}$Mo$_{64}$	171	1.31 *7*	1.18 *21*	1.102	1.735	1.675	0.501	1.904	1.229	1.392	0.466
$^{108}_{42}$Mo$_{66}$	192	1.6 *5*	1.03 *18*	1.084	1.425	1.497	0.524	1.885	1.185	0.514	0.519
$^{110}_{42}$Mo$_{68}$				1.062	1.395	1.429	0.549	0.815	1.136	0.522	0.536
$^{112}_{42}$Mo$_{70}$				1.041	1.376	1.420	0.519	0.835	0.506	0.520	0.539
$^{84}_{44}$Ru$_{40}$				0.621	0.025	1.445	0.319	0.563	sph.	sph.	
$^{86}_{44}$Ru$_{42}$				0.549	0.025	sph.	0.379	0.001	sph.	sph.	
$^{88}_{44}$Ru$_{44}$	616		0.41 *7*	0.442	0.026	sph.	0.123	0.004	sph.	sph.	0.234
$^{90}_{44}$Ru$_{46}$	738		0.34 *6*	0.343	0.027	sph.	0.137	0.004	sph.	sph.	0.166
$^{92}_{44}$Ru$_{48}$	864		0.282 *49*	0.257	0.028	sph.	0.040	0.004	sph.	sph.	0.103
$^{94}_{44}$Ru$_{50}$	1430		0.168 *29*	0.153	0.013	sph.	sph.	0.004	sph.	sph.	0.078
$^{96}_{44}$Ru$_{52}$	832	0.251 *10*	0.28 *5*	0.359	0.030	sph.	0.001	0.004	0.001	sph.	0.113
$^{98}_{44}$Ru$_{54}$	652	0.392 *12*	0.36 *6*	0.495	0.160	sph.	0.286	0.224	0.093	0.143	0.146
$^{100}_{44}$Ru$_{56}$	539	0.490 *5*	0.43 *7*	0.634	0.324	0.198	0.445	0.390	0.303	0.224	0.189
$^{102}_{44}$Ru$_{58}$	475	0.630 *10*	0.48 *8*	0.769	0.457	0.372	0.545	0.556	0.442	0.386	0.328
$^{104}_{44}$Ru$_{60}$	358	0.820 *12*	0.63 *11*	0.886	0.919	0.530	0.988	0.694	0.614	0.568	0.278
$^{106}_{44}$Ru$_{62}$	270	0.77 *20*	0.82 *14*	0.951	1.160	0.861	1.696	0.712	0.807	0.513	0.407
$^{108}_{44}$Ru$_{64}$	242	1.01 *15*	0.90 *16*	0.950	1.153	0.886	0.584	0.873	0.905	0.543	0.482
$^{110}_{44}$Ru$_{66}$	240	1.05 *12*	0.90 *16*	0.932	0.564	0.909	0.599	0.894	0.911	0.561	0.553
$^{112}_{44}$Ru$_{68}$	236	1.17 *23*	0.90 *16*	0.912	0.580	0.930	0.622	0.916	0.878	0.570	0.572
$^{114}_{44}$Ru$_{70}$	127		1.66 *29*	0.891	0.581	0.902	0.601	0.719	0.556	0.904	0.503
$^{116}_{44}$Ru$_{72}$				0.777	0.555	0.692	0.501	0.735	0.462	0.546	0.541

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{118}_{44}$Ru$_{74}$				0.626	0.388	0.127	0.423	0.752		sph.	0.376
$^{90}_{46}$Pd$_{44}$				0.323	0.029	sph.	0.140	0.190	sph.	sph.	
$^{92}_{46}$Pd$_{46}$				0.236	0.030	sph.	0.146	0.196	sph.	sph.	0.143
$^{94}_{46}$Pd$_{48}$	814		0.32 *6*	0.164	0.022	sph.	0.061	0.004	sph.	sph.	0.108
$^{96}_{46}$Pd$_{50}$	1415		0.183 *32*	0.082	0.008	sph.	sph.	0.001	sph.	sph.	0.073
$^{98}_{46}$Pd$_{52}$	863		0.30 *5*	0.250	0.024	sph.	0.001	0.042	sph.	sph.	0.100
$^{100}_{46}$Pd$_{54}$	665		0.38 *7*	0.369	0.099	sph.	0.236	0.251	sph.	0.143	0.130
$^{102}_{46}$Pd$_{56}$	556	0.460 *30*	0.45 *8*	0.494	0.278	0.170	0.354	0.388	0.265	0.232	0.167
$^{104}_{46}$Pd$_{58}$	555	0.535 *35*	0.44 *8*	0.619	0.361	0.271	0.402	0.449	0.358	0.321	0.207
$^{106}_{46}$Pd$_{60}$	511	0.660 *35*	0.47 *8*	0.728	0.404	0.385	0.405	0.517	0.429	0.357	0.392
$^{108}_{46}$Pd$_{62}$	433	0.760 *40*	0.55 *10*	0.789	0.520	0.408	0.451	0.797	0.500	0.518	0.359
$^{110}_{46}$Pd$_{64}$	373	0.870 *40*	0.63 *11*	0.788	0.707	0.544	0.832	0.817	0.573	0.554	0.306
$^{112}_{46}$Pd$_{66}$	348	0.66 *11*	0.67 *12*	0.771	0.600	0.546	0.650	0.767	0.586	0.597	0.493
$^{114}_{46}$Pd$_{68}$	332	0.38 *12*	0.69 *12*	0.752	0.635	0.585	0.675	0.785	0.523	0.605	0.567
$^{116}_{46}$Pd$_{70}$	340	0.62 *18*	0.67 *12*	0.732	0.638	0.526	0.654	0.804	0.309	0.587	0.557
$^{118}_{46}$Pd$_{72}$	378		0.60 *10*	0.626	0.603	0.211	0.505	0.822	0.143	sph.	0.368
$^{120}_{46}$Pd$_{74}$				0.487	0.376	0.072	0.347	0.370	0.009	sph.	0.262
$^{122}_{46}$Pd$_{76}$				0.362	0.216	0.004	0.179	0.006	sph.	sph.	
$^{94}_{48}$Cd$_{46}$				0.145	0.034	sph.	0.058	0.044	sph.	sph.	
$^{96}_{48}$Cd$_{48}$				0.089	0.025	sph.	sph.	0.001	sph.	sph.	0.092
$^{98}_{48}$Cd$_{50}$	1394		0.199 *35*	0.031	0.009	sph.	sph.	0.001	sph.	sph.	0.067
$^{100}_{48}$Cd$_{52}$	1004		0.273 *48*	0.157	0.016	sph.	sph.	0.001	sph.	sph.	0.078
$^{102}_{48}$Cd$_{54}$	776		0.35 *6*	0.257	0.039	sph.	0.103	0.112	sph.	sph.	0.093
$^{104}_{48}$Cd$_{56}$	658	0.41 *11*	0.41 *7*	0.366	0.115	0.018	0.225	0.333	sph.	0.172	0.107
$^{106}_{48}$Cd$_{58}$	632	0.410 *20*	0.42 *7*	0.478	0.236	0.100	0.281	0.341	sph.	0.244	0.127
$^{108}_{48}$Cd$_{60}$	632	0.430 *20*	0.41 *7*	0.577	0.272	0.159	0.294	0.448	sph.	0.269	0.149
$^{110}_{48}$Cd$_{62}$	657	0.450 *20*	0.39 *7*	0.634	0.311	0.197	0.299	0.509	sph.	0.331	0.157
$^{112}_{48}$Cd$_{64}$	617	0.510 *20*	0.41 *7*	0.632	0.319	0.165	0.535	0.606	sph.	0.353	0.206
$^{114}_{48}$Cd$_{66}$	558	0.545 *20*	0.45 *8*	0.617	0.419	0.047	0.635	0.933	0.279	0.367	0.243
$^{116}_{48}$Cd$_{68}$	513	0.560 *20*	0.48 *8*	0.600	0.684	sph.	0.712	0.955	0.150	0.371	0.299
$^{118}_{48}$Cd$_{70}$	487	0.568 *44*	0.50 *9*	0.581	0.688	0.033	0.700	0.559	0.021	sph.	0.266
$^{120}_{48}$Cd$_{72}$	505	0.48 *6*	0.48 *8*	0.484	0.305	0.011	0.031	0.403	0.008	sph.	0.190
$^{122}_{48}$Cd$_{74}$	569	0.58 *27*	0.42 *7*	0.359	0.197	sph.	0.092	0.006	sph.	sph.	0.140
$^{124}_{48}$Cd$_{76}$	613		0.39 *7*	0.250	sph.	sph.	0.090	0.002	sph.	sph.	
$^{126}_{48}$Cd$_{78}$	652		0.36 *6*	0.161	sph.	sph.	sph.	0.002	sph.	sph.	
$^{128}_{48}$Cd$_{80}$				0.092	sph.	0.002	sph.	0.002	sph.	sph.	
$^{130}_{48}$Cd$_{82}$				0.031	sph.	sph.	sph.	0.002	sph.	sph.	
$^{98}_{50}$Sn$_{48}$				0.016	0.001	sph.	sph.	0.001	sph.	sph.	
$^{100}_{50}$Sn$_{50}$				sph.	0.001	sph.	sph.	sph.	sph.	sph.	1.087
$^{102}_{50}$Sn$_{52}$	1472		0.200 *35*	0.051	0.001	sph.	sph.	sph.	sph.	sph.	0.059
$^{104}_{50}$Sn$_{54}$	1260		0.230 *40*	0.116	0.005	sph.	sph.	sph.	sph.	sph.	0.057
$^{106}_{50}$Sn$_{56}$	1207		0.237 *41*	0.195	0.011	sph.	0.004	sph.	sph.	sph.	0.056
$^{108}_{50}$Sn$_{58}$	1206		0.234 *41*	0.281	0.019	0.002	0.003	0.026	sph.	sph.	0.056

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{110}_{50}$Sn$_{60}$	1211		0.231 *40*	0.361	0.011	sph.	0.002	0.038	sph.	sph.	0.061
$^{112}_{50}$Sn$_{62}$	1256	0.240 *14*	0.220 *38*	0.407	0.005	sph.	0.001	0.181	sph.	sph.	0.064
$^{114}_{50}$Sn$_{64}$	1299	0.24 *5*	0.210 *37*	0.406	sph.	0.001	sph.	0.186	sph.	sph.	0.068
$^{116}_{50}$Sn$_{66}$	1293	0.209 *6*	0.208 *36*	0.394	sph.	0.001	sph.	0.190	sph.	sph.	0.071
$^{118}_{50}$Sn$_{68}$	1229	0.209 *8*	0.217 *38*	0.379	sph.	sph.	sph.	0.130	sph.	sph.	0.074
$^{120}_{50}$Sn$_{70}$	1171	0.2020 *40*	0.225 *39*	0.365	sph.	0.002	sph.	0.007	sph.	sph.	0.074
$^{122}_{50}$Sn$_{72}$	1140	0.1920 *40*	0.229 *40*	0.286	sph.	0.001	sph.	0.002	sph.	sph.	0.070
$^{124}_{50}$Sn$_{74}$	1131	0.1660 *40*	0.228 *40*	0.190	sph.	sph.	sph.	0.002	sph.	sph.	0.060
$^{126}_{50}$Sn$_{76}$	1141		0.224 *39*	0.111	sph.	sph.	sph.	0.002	sph.	sph.	
$^{128}_{50}$Sn$_{78}$	1168		0.216 *38*	0.053	sph.	sph.	sph.	0.002	sph.	sph.	
$^{130}_{50}$Sn$_{80}$	1221		0.205 *36*	0.017	sph.	sph.	sph.	0.002	sph.	sph.	
$^{132}_{50}$Sn$_{82}$	4041		0.061 *11*	sph.	sph.	sph.	sph.	0.002	sph.	sph.	
$^{134}_{50}$Sn$_{84}$	725		0.34 *6*	0.060	sph.	sph.	sph.	0.002	sph.	sph.	
$^{136}_{50}$Sn$_{86}$				0.160	sph.	sph.	sph.	0.002	sph.	sph.	
$^{138}_{50}$Sn$_{88}$				0.296	sph.	sph.	sph.	0.009		sph.	
$^{104}_{52}$Te$_{52}$				0.320	0.034	sph.		0.144	sph.	sph.	0.181
$^{106}_{52}$Te$_{54}$				0.465	0.188	0.005	0.274	0.322	0.022	0.012	0.127
$^{108}_{52}$Te$_{56}$	625		0.49 *9*	0.618	0.364	0.104	0.366	0.435	0.430	0.361	0.139
$^{110}_{52}$Te$_{58}$	657		0.46 *8*	0.770	0.477	0.269	0.416	0.511	0.519	0.608	0.160
$^{112}_{52}$Te$_{60}$	689		0.43 *8*	0.903	0.544	0.281	0.474	0.767	sph.	0.402	0.216
$^{114}_{52}$Te$_{62}$	708		0.42 *7*	0.978	0.547	0.556	1.055	0.859	sph.	0.336	0.230
$^{116}_{52}$Te$_{64}$	678		0.43 *7*	0.977	0.699	0.553	1.321	0.995	0.356	0.353	0.287
$^{118}_{52}$Te$_{66}$	605		0.48 *8*	0.957	0.370	0.551	0.425	1.102	0.364	0.322	0.298
$^{120}_{52}$Te$_{68}$	560	0.77 *16*	0.51 *9*	0.934	0.418	0.310	0.447	1.127	0.345	0.303	0.334
$^{122}_{52}$Te$_{70}$	564	0.660 *6*	0.50 *9*	0.911	0.336	0.162	0.366	0.653	0.198	0.286	0.311
$^{124}_{52}$Te$_{72}$	602	0.568 *6*	0.46 *8*	0.782	0.227	0.031	0.280	0.373	sph.	0.129	0.269
$^{126}_{52}$Te$_{74}$	666	0.475 *10*	0.41 *7*	0.612	0.198	0.004	0.001	0.139	sph.	sph.	0.165
$^{128}_{52}$Te$_{76}$	743	0.383 *6*	0.37 *6*	0.458	sph.	sph.	0.102	0.008	sph.	sph.	
$^{130}_{52}$Te$_{78}$	839	0.295 *7*	0.32 *6*	0.328	sph.	sph.	0.023	0.009	sph.	sph.	
$^{132}_{52}$Te$_{80}$	973		0.275 *48*	0.220	sph.	sph.	sph.	0.002	sph.	sph.	0.071
$^{134}_{52}$Te$_{82}$	1279		0.207 *36*	0.112	sph.	sph.	sph.	0.002	sph.	sph.	0.178
$^{136}_{52}$Te$_{84}$	605		0.43 *8*	0.346	sph.	0.001	sph.	0.002	0.001	sph.	0.075
$^{138}_{52}$Te$_{86}$	443		0.59 *10*	0.558	sph.	0.076	sph.	0.009	sph.	sph.	0.082
$^{140}_{52}$Te$_{88}$				0.803	0.490	0.316	0.312	0.009	sph.	sph.	0.102
$^{142}_{52}$Te$_{90}$				0.972	0.860	0.489	0.453	0.010		sph.	0.144
$^{108}_{54}$Xe$_{54}$				0.758	0.522	0.354		0.623	0.671	0.477	
$^{110}_{54}$Xe$_{56}$				0.956	0.647	0.522	0.699	0.883	0.862	0.662	
$^{112}_{54}$Xe$_{58}$	466		0.69 *12*	1.148	0.822	0.773	0.825	1.220	1.051	1.186	
$^{114}_{54}$Xe$_{60}$	449	0.93 *6*	0.71 *12*	1.314	1.139	1.219	1.071	1.368	1.306	0.947	
$^{116}_{54}$Xe$_{62}$	393	1.21 *6*	0.80 *14*	1.407	1.380	1.417	1.378	1.992	1.605	1.265	
$^{118}_{54}$Xe$_{64}$	337	1.40 *7*	0.92 *16*	1.406	1.488	1.370	1.529	1.815	1.671	1.424	
$^{120}_{54}$Xe$_{66}$	322	1.73 *11*	0.95 *17*	1.382	1.466	1.181	1.650	1.856	1.676	1.250	
$^{122}_{54}$Xe$_{68}$	331	1.40 *6*	0.92 *16*	1.354	1.358	1.214	1.625	1.577	1.530	1.140	

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{124}_{54}$Xe$_{70}$	354	0.96 *6*	0.85 *15*	1.326	1.065	0.983	1.036	1.475	1.048	1.067	
$^{126}_{54}$Xe$_{72}$	388	0.770 *25*	0.77 *13*	1.165	0.711	0.707	0.798	1.019	0.671	0.818	
$^{128}_{54}$Xe$_{74}$	442	0.750 *40*	0.66 *12*	0.950	0.510	0.466	0.617	0.649	0.318	sph.	
$^{130}_{54}$Xe$_{76}$	536	0.65 *5*	0.54 *9*	0.751	0.256	0.303	0.419	0.428	sph.	sph.	
$^{132}_{54}$Xe$_{78}$	667	0.460 *30*	0.43 *8*	0.577	sph.	0.063	0.108	0.160	sph.	sph.	
$^{134}_{54}$Xe$_{80}$	847	0.34 *6*	0.34 *6*	0.427	sph.	sph.	sph.	0.040	sph.	sph.	0.106
$^{136}_{54}$Xe$_{82}$	1313	0.36 *6*	0.215 *38*	0.266	sph.	sph.	sph.	0.002	sph.	sph.	0.271
$^{138}_{54}$Xe$_{84}$	588		0.48 *8*	0.602	sph.	0.087	sph.	0.096	sph.	sph.	0.104
$^{140}_{54}$Xe$_{86}$	376	0.324 *14*	0.74 *13*	0.883	0.425	0.338	0.300	0.356	sph.	0.211	0.130
$^{142}_{54}$Xe$_{88}$	287		0.96 *17*	1.195	0.695	0.592	0.540	0.598	sph.	0.451	0.185
$^{144}_{54}$Xe$_{90}$	252		1.08 *19*	1.405	1.179	0.827	0.704	0.915	sph.	0.706	0.406
$^{146}_{54}$Xe$_{92}$				1.598	1.925	1.569	0.832	1.674	1.275	1.036	1.081
$^{148}_{54}$Xe$_{94}$				1.763	1.969	1.785	0.997	1.838	1.515	1.430	1.200
$^{114}_{56}$Ba$_{58}$				1.573	1.646	1.888	1.354	2.258	2.001	1.453	
$^{116}_{56}$Ba$_{60}$				1.771	2.357	2.197	2.409	2.882	2.895	2.173	
$^{118}_{56}$Ba$_{62}$	194		1.72 *30*	1.882	2.488	2.507	2.507	3.256	2.844	2.550	
$^{120}_{56}$Ba$_{64}$	183		1.81 *32*	1.881	2.254	2.176	2.390	3.269	2.585	2.573	
$^{122}_{56}$Ba$_{66}$	196	2.81 *28*	1.67 *29*	1.854	2.060	1.964	2.281	2.759	2.439	2.111	
$^{124}_{56}$Ba$_{68}$	229	2.09 *10*	1.41 *25*	1.821	2.031	1.776	2.098	2.393	2.222	1.859	
$^{126}_{56}$Ba$_{70}$	256	1.75 *9*	1.25 *22*	1.787	1.753	1.556	1.670	2.225	1.830	1.559	
$^{128}_{56}$Ba$_{72}$	284	1.48 *7*	1.11 *19*	1.595	1.287	1.170	1.202	1.597	1.216	1.293	
$^{130}_{56}$Ba$_{74}$	357	1.163 *16*	0.88 *15*	1.336	0.797	0.839	0.882	1.102	0.826	0.930	
$^{132}_{56}$Ba$_{76}$	464	0.86 *6*	0.67 *12*	1.092	0.555	0.542	0.369	0.727	sph.	sph.	
$^{134}_{56}$Ba$_{78}$	604	0.658 *7*	0.51 *9*	0.874	0.281	0.293	0.200	0.480	sph.	sph.	
$^{136}_{56}$Ba$_{80}$	818	0.410 *8*	0.37 *6*	0.682	sph.	sph.	sph.	0.179	sph.	sph.	0.145
$^{138}_{56}$Ba$_{82}$	1435	0.230 *9*	0.210 *37*	0.468	sph.	sph.	sph.	0.003	sph.	sph.	0.399
$^{140}_{56}$Ba$_{84}$	602	0.45 *19*	0.50 *9*	0.907	sph.	0.082	sph.	0.247	sph.	sph.	0.137
$^{142}_{56}$Ba$_{86}$	359	0.699 *37*	0.82 *14*	1.256	0.631	0.510	0.080	0.643	sph.	0.368	0.197
$^{144}_{56}$Ba$_{88}$	199	1.05 *6*	1.47 *26*	1.634	0.989	0.860	0.639	0.984	sph.	0.757	0.378
$^{146}_{56}$Ba$_{90}$	181	1.355 *48*	1.60 *28*	1.886	1.584	1.183	0.903	1.441	1.408	1.321	0.878
$^{148}_{56}$Ba$_{92}$	141		2.03 *35*	2.115	2.467	2.194	1.105	2.208	2.025	1.726	1.526
$^{150}_{56}$Ba$_{94}$				2.311	2.582	2.460	1.474	2.619	2.297	2.218	1.113
$^{152}_{56}$Ba$_{96}$				2.478	2.984	2.593	2.208	2.892		2.533	1.243
$^{120}_{58}$Ce$_{62}$				2.387	3.183	3.226	3.658	4.065	3.957	3.749	
$^{122}_{58}$Ce$_{64}$				2.387	3.126	3.250	3.574	4.616	3.700	3.814	
$^{124}_{58}$Ce$_{66}$	142	3.7 *9*	2.44 *43*	2.355	2.866	2.819	3.383	4.097	3.394	3.569	
$^{126}_{58}$Ce$_{68}$	169	2.68 *48*	2.02 *35*	2.318	2.626	2.440	3.094	3.856	3.091	3.081	
$^{128}_{58}$Ce$_{70}$	207	2.28 *22*	1.64 *29*	2.279	2.256	2.105	2.565	3.046	2.722	2.486	
$^{130}_{58}$Ce$_{72}$	253	1.74 *10*	1.32 *23*	2.057	1.820	1.662	1.708	2.488	1.805	2.226	
$^{132}_{58}$Ce$_{74}$	325	1.87 *17*	1.02 *18*	1.753	1.177	1.152	1.231	1.629	1.144	1.486	
$^{134}_{58}$Ce$_{76}$	409	1.04 *9*	0.81 *14*	1.466	0.770	0.764	0.838	1.002	sph.	0.724	
$^{136}_{58}$Ce$_{78}$	552	0.81 *9*	0.59 *10*	1.205	0.337	0.415	0.165	0.601	sph.	sph.	
$^{138}_{58}$Ce$_{80}$	788	0.450 *30*	0.41 *7*	0.973	sph.	sph.	sph.	0.196	sph.	sph.	0.196
$^{140}_{58}$Ce$_{82}$	1596	0.298 *6*	0.201 *35*	0.707	sph.	sph.	sph.	sph.	sph.	sph.	0.210

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{142}_{58}$Ce$_{84}$	641	0.480 *6*	0.49 *9*	1.245	sph.	0.093	sph.	0.401	sph.	sph.	0.180
$^{144}_{58}$Ce$_{86}$	397	0.83 *9*	0.79 *14*	1.661	0.788	0.715	0.031	0.795	sph.	0.631	0.300
$^{146}_{58}$Ce$_{88}$	258	1.14 *12*	1.20 *21*	2.104	1.349	1.288	0.750	1.546	1.187	1.024	0.727
$^{148}_{58}$Ce$_{90}$	158	1.96 *18*	1.95 *34*	2.398	2.096	2.185	1.205	2.369	2.218	1.844	1.693
$^{150}_{58}$Ce$_{92}$	97	3.3 *8*	3.1 *6*	2.663	3.061	2.704	2.796	2.920	3.066	2.456	1.147
$^{152}_{58}$Ce$_{94}$	81		3.7 *6*	2.888	3.253	3.033	3.188	3.421	3.342	3.019	1.539
$^{154}_{58}$Ce$_{96}$				3.080	3.453	3.205	3.371	3.969	3.484	3.200	1.679
$^{156}_{58}$Ce$_{98}$				3.269	3.403	3.417	3.614	4.038		3.492	1.941
$^{124}_{60}$Nd$_{64}$				2.875	3.933	3.993	4.376	5.048	4.647	4.480	
$^{126}_{60}$Nd$_{66}$				2.839	3.921	3.581	4.223	5.157	4.356	4.468	
$^{128}_{60}$Nd$_{68}$	133		2.72 *47*	2.797	3.607	3.201	4.057	4.783	4.039	4.192	
$^{130}_{60}$Nd$_{70}$	158	4.1 *18*	2.28 *40*	2.754	3.363	2.873	3.847	4.798	3.655	3.850	
$^{132}_{60}$Nd$_{72}$	212	3.5 *6*	1.68 *29*	2.504	2.990	2.343	2.528	4.896	2.631	3.761	
$^{134}_{60}$Nd$_{74}$	294	1.83 *37*	1.20 *21*	2.160	1.549	1.549	1.797	4.479	1.551	3.103	
$^{136}_{60}$Nd$_{76}$	373		0.93 *16*	1.832	0.931	0.944	1.266	1.344	0.884	0.705	
$^{138}_{60}$Nd$_{78}$	520		0.66 *12*	1.533	0.487	0.506	0.397	0.758	sph.	sph.	
$^{140}_{60}$Nd$_{80}$	773		0.44 *8*	1.263	sph.	0.002	0.001	0.267	sph.	sph.	0.273
$^{142}_{60}$Nd$_{82}$	1575	0.265 *6*	0.215 *38*	0.951	sph.	sph.	sph.	sph.	sph.	sph.	0.233
$^{144}_{60}$Nd$_{84}$	696	0.491 *5*	0.48 *8*	1.579	sph.	sph.	0.001	0.513	sph.	sph.	0.234
$^{146}_{60}$Nd$_{86}$	453	0.760 *25*	0.73 *13*	2.056	1.089	0.967	0.148	1.455	0.029	0.754	0.462
$^{148}_{60}$Nd$_{88}$	301	1.35 *5*	1.09 *19*	2.560	1.920	1.850	1.081	2.269	1.550	1.540	1.368
$^{150}_{60}$Nd$_{90}$	130	2.760 *40*	2.51 *44*	2.891	2.915	2.773	2.533	3.125	3.120	2.592	2.185
$^{152}_{60}$Nd$_{92}$	72	4.20 *28*	4.5 *8*	3.189	3.635	3.341	3.687	4.026	3.982	3.301	1.654
$^{154}_{60}$Nd$_{94}$	70		4.5 *8*	3.441	3.832	3.710	4.016	4.097	4.322	3.737	1.860
$^{156}_{60}$Nd$_{96}$	66		4.8 *8*	3.657	4.049	3.986	4.238	4.818	4.491	4.101	2.080
$^{158}_{60}$Nd$_{98}$				3.869	3.991	4.153	4.501	4.722	4.531	4.060	2.626
$^{160}_{60}$Nd$_{100}$				4.077	4.303	4.358	4.711	5.054		4.194	2.738
$^{126}_{62}$Sm$_{64}$				3.226	4.202	4.402	4.989	6.192	5.261	5.092	
$^{128}_{62}$Sm$_{66}$				3.188	4.182	4.117	4.762	5.107	4.848	5.027	
$^{130}_{62}$Sm$_{68}$	122		3.1 *6*	3.143	4.107	3.655	4.543	5.445	4.533	4.808	
$^{132}_{62}$Sm$_{70}$	131		2.9 *5*	3.096	3.889	3.387	4.408	5.557	4.270	4.776	
$^{134}_{62}$Sm$_{72}$	163	4.2 *6*	2.31 *40*	2.824	3.714	3.000	5.213	5.670	4.835	4.750	
$^{136}_{62}$Sm$_{74}$	254	2.73 *27*	1.46 *26*	2.451	2.027	2.001	2.740	5.441	2.136	4.685	
$^{138}_{62}$Sm$_{76}$	346	1.41 *23*	1.06 *19*	2.093	1.253	1.129	1.921	2.844	0.941	1.972	
$^{140}_{62}$Sm$_{78}$	530		0.69 *12*	1.764	0.606	0.609	0.823	0.826	sph.	0.036	
$^{142}_{62}$Sm$_{80}$	768		0.47 *8*	1.467	sph.	sph.	0.037	0.291	sph.	sph.	0.360
$^{144}_{62}$Sm$_{82}$	1660	0.262 *6*	0.216 *38*	1.122	sph.	sph.	sph.	sph.	sph.	sph.	0.257
$^{146}_{62}$Sm$_{84}$	747		0.48 *8*	1.815	sph.	sph.	0.008	0.558	sph.	sph.	0.288
$^{148}_{62}$Sm$_{86}$	550	0.720 *30*	0.64 *11*	2.337	1.161	1.093	0.587	1.729	sph.	1.137	0.712
$^{150}_{62}$Sm$_{88}$	333	1.350 *30*	1.05 *18*	2.886	2.019	2.090	1.562	2.467	1.871	1.958	2.316
$^{152}_{62}$Sm$_{90}$	121	3.46 *6*	2.8 *5*	3.246	3.059	3.093	3.043	3.267	3.502	3.230	1.359
$^{154}_{62}$Sm$_{92}$	81	4.36 *5*	4.2 *7*	3.570	4.083	3.783	4.006	3.978	4.287	3.771	2.057
$^{156}_{62}$Sm$_{94}$	75		4.5 *8*	3.844	4.324	4.273	4.361	4.614	4.676	4.239	2.413

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{158}_{62}$Sm$_{96}$	72		4.6 *8*	4.078	4.261	4.598	4.647	5.042	4.900	4.431	2.752
$^{160}_{62}$Sm$_{98}$	70		4.7 *8*	4.307	4.595	4.823	4.945	5.127	5.032	4.609	2.948
$^{162}_{62}$Sm$_{100}$				4.532	4.825	4.950	5.152	5.487	5.117	4.713	3.000
$^{164}_{62}$Sm$_{102}$				4.608	4.833	5.120	5.241	6.261		4.676	2.965
$^{134}_{64}$Gd$_{70}$				3.231	4.076	3.586	4.756	5.837	4.731	5.097	
$^{136}_{64}$Gd$_{72}$				2.947	3.635	3.348	5.375	5.953	4.866	5.071	
$^{138}_{64}$Gd$_{74}$	220		1.78 *31*	2.557	2.538	2.582	4.837	6.070	2.841	4.784	
$^{140}_{64}$Gd$_{76}$	328		1.19 *21*	2.184	1.669	1.485	4.187	4.716	1.223	1.489	
$^{142}_{64}$Gd$_{78}$	515		0.75 *13*	1.841	0.729	0.690	1.168	1.376	0.778	0.528	
$^{144}_{64}$Gd$_{80}$	743		0.51 *9*	1.530	sph.	0.007	0.691	0.137	sph.	sph.	0.434
$^{146}_{64}$Gd$_{82}$	1971		0.192 *34*	1.169	sph.	sph.	0.001	sph.	sph.	sph.	0.282
$^{148}_{64}$Gd$_{84}$	784		0.48 *8*	1.894	sph.	sph.	0.297	0.605	sph.	sph.	0.336
$^{150}_{64}$Gd$_{86}$	638		0.58 *10*	2.439	1.235	1.062	1.030	1.876	0.891	0.763	0.899
$^{152}_{64}$Gd$_{88}$	344	1.67 *14*	1.07 *19*	3.013	2.137	2.050	1.771	3.199	2.031	2.404	1.512
$^{154}_{64}$Gd$_{90}$	123	3.89 *7*	3.0 *5*	3.389	3.204	3.071	3.063	3.844	3.592	3.380	1.712
$^{156}_{64}$Gd$_{92}$	88	4.64 *5*	4.1 *7*	3.728	4.243	3.776	4.294	4.916	4.511	4.145	2.265
$^{158}_{64}$Gd$_{94}$	79	5.02 *5*	4.5 *8*	4.014	4.240	4.275	4.781	5.001	4.972	4.643	2.710
$^{160}_{64}$Gd$_{96}$	75	5.25 *6*	4.7 *8*	4.259	4.503	4.608	5.148	5.463	5.254	4.899	3.030
$^{162}_{64}$Gd$_{98}$	71		5.0 *10*	4.499	4.776	4.793	5.440	5.846	5.445	5.053	3.165
$^{164}_{64}$Gd$_{100}$				4.735	5.094	5.020	5.633	6.136	5.606	5.058	3.252
$^{166}_{64}$Gd$_{102}$				4.814	5.032	5.131	5.729	6.661	5.667	5.129	3.319
$^{138}_{66}$Dy$_{72}$				3.017	3.813	3.581	5.152	5.513	5.074	5.243	
$^{140}_{66}$Dy$_{74}$				2.614	2.947	2.877	4.792	5.620	3.867	4.432	
$^{142}_{66}$Dy$_{76}$	315		1.30 *23*	2.228	1.960	1.970	4.408	4.616	1.484	1.676	
$^{144}_{66}$Dy$_{78}$	492		0.83 *14*	1.874	0.870	0.852	1.442	1.369	0.968	1.177	
$^{146}_{66}$Dy$_{80}$	682		0.59 *10*	1.554	sph.	sph.	1.092	0.149	sph.	sph.	0.527
$^{148}_{66}$Dy$_{82}$	1677		0.238 *42*	1.183	sph.	0.001	0.002	0.016	sph.	sph.	0.300
$^{150}_{66}$Dy$_{84}$	803		0.49 *9*	1.929	sph.	sph.	0.523	0.655	0.008	sph.	0.379
$^{152}_{66}$Dy$_{86}$	613	0.43 *23*	0.64 *11*	2.491	1.179	0.943	1.311	2.489	1.014	1.367	1.045
$^{154}_{66}$Dy$_{88}$	334	2.39 *13*	1.16 *20*	3.085	2.272	1.985	1.939	3.053	2.021	2.315	1.736
$^{156}_{66}$Dy$_{90}$	137	3.710 *40*	2.80 *49*	3.474	3.060	2.933	2.749	3.761	3.367	3.292	1.887
$^{158}_{66}$Dy$_{92}$	98	4.66 *5*	3.9 *7*	3.825	4.040	3.721	3.877	4.939	4.490	4.208	2.458
$^{160}_{66}$Dy$_{94}$	86	5.13 *11*	4.4 *8*	4.122	4.396	4.217	4.678	5.309	5.037	4.809	4.657
$^{162}_{66}$Dy$_{96}$	80	5.35 *11*	4.7 *8*	4.376	4.680	4.503	5.326	6.218	5.405	5.265	3.178
$^{164}_{66}$Dy$_{98}$	73	5.60 *5*	5.1 *9*	4.625	5.033	4.792	5.745	6.525	5.666	5.592	3.463
$^{166}_{66}$Dy$_{100}$	76		4.8 *8*	4.869	5.016	5.025	5.968	6.632	5.866	5.696	3.518
$^{168}_{66}$Dy$_{102}$				4.952	5.318	5.150	6.038	6.396	5.965	5.451	3.497
$^{170}_{66}$Dy$_{104}$				4.802	4.955	4.994	5.803	6.498	5.609	5.661	3.084
$^{140}_{68}$Er$_{72}$				3.072	4.026	3.834	5.054	6.046	5.227	5.262	
$^{142}_{68}$Er$_{74}$				2.658	3.331	3.222	4.124	5.881	4.188	4.629	
$^{144}_{68}$Er$_{76}$	330		1.31 *23*	2.261	2.085	2.301	3.461	5.345	1.685	4.071	
$^{146}_{68}$Er$_{78}$				1.897	1.022	0.954	1.657	1.445	1.100	1.450	
$^{148}_{68}$Er$_{80}$	646		0.66 *11*	1.569	0.853	0.002	1.340	1.345	sph.	sph.	0.582

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{150}_{68}$Er$_{82}$	1578		0.266 *46*	1.188	0.003	sph.	0.006	0.018	sph.	sph.	0.318
$^{152}_{68}$Er$_{84}$	808		0.52 *9*	1.953	0.014	0.001	0.586	0.708	0.013	sph.	0.386
$^{154}_{68}$Er$_{86}$	560		0.74 *13*	2.532	1.104	0.744	1.423	1.688	1.073	0.880	0.901
$^{156}_{68}$Er$_{88}$	344	1.64 *7*	1.19 *21*	3.143	1.979	1.708	1.998	3.177	1.997	2.233	1.504
$^{158}_{68}$Er$_{90}$	192	3.05 *24*	2.11 *37*	3.545	2.695	2.712	2.597	3.913	3.032	3.198	1.961
$^{160}_{68}$Er$_{92}$	125	4.38 *20*	3.2 *6*	3.907	3.893	3.596	3.457	4.591	4.165	4.272	4.325
$^{162}_{68}$Er$_{94}$	102	5.01 *6*	3.9 *7*	4.214	4.603	4.209	4.266	5.938	4.872	4.562	2.925
$^{164}_{68}$Er$_{96}$	91	5.45 *6*	4.3 *8*	4.476	4.572	4.620	5.006	6.927	5.409	5.465	3.357
$^{166}_{68}$Er$_{98}$	80	5.83 *5*	4.9 *9*	4.734	4.901	4.846	5.700	5.922	5.800	5.579	3.630
$^{168}_{68}$Er$_{100}$	79	5.79 *10*	4.9 *9*	4.987	5.291	5.126	6.080	6.789	6.075	6.103	3.661
$^{170}_{68}$Er$_{102}$	78	5.82 *10*	4.9 *9*	5.073	5.308	5.257	6.153	6.897	6.201	6.178	3.605
$^{172}_{68}$Er$_{104}$	77		5.0 *9*	4.917	5.241	5.108	5.885	6.327	5.853	5.706	3.190
$^{174}_{68}$Er$_{106}$				4.763	4.816	4.835	5.642	6.426	5.501	5.289	3.019
$^{176}_{68}$Er$_{108}$				4.562	4.491	4.525	5.447	5.886	5.228	5.192	2.865
$^{148}_{70}$Yb$_{78}$				1.915	1.194	0.947	1.760	1.559	1.180	1.517	
$^{150}_{70}$Yb$_{80}$				1.579	0.920	sph.	1.428	1.451	sph.	sph.	0.590
$^{152}_{70}$Yb$_{82}$	1531		0.29 *5*	1.189	sph.	0.001	0.009	0.019	sph.	sph.	0.315
$^{154}_{70}$Yb$_{84}$	821		0.53 *9*	1.972	0.003	0.007	0.577	0.764	0.016	sph.	0.374
$^{156}_{70}$Yb$_{86}$	536		0.81 *14*	2.566	0.880	0.670	1.389	1.419	1.043	0.482	0.699
$^{158}_{70}$Yb$_{88}$	358	1.87 *23*	1.20 *21*	3.195	1.532	1.427	1.937	2.524	1.902	2.111	1.610
$^{160}_{70}$Yb$_{90}$	243	2.66 *16*	1.75 *31*	3.609	2.590	2.124	2.469	3.803	2.728	2.993	1.690
$^{162}_{70}$Yb$_{92}$	166	3.53 *15*	2.54 *44*	3.982	3.133	3.086	3.141	4.860	3.687	3.888	2.555
$^{164}_{70}$Yb$_{94}$	123	4.38 *26*	3.4 *6*	4.299	4.423	4.118	4.067	5.429	4.535	4.673	2.929
$^{166}_{70}$Yb$_{96}$	102	5.24 *31*	4.1 *7*	4.569	4.814	4.339	4.857	6.275	5.235	5.228	3.443
$^{168}_{70}$Yb$_{98}$	87	5.58 *30*	4.7 *8*	4.836	5.171	5.391	5.449	6.376	5.783	5.856	3.703
$^{170}_{70}$Yb$_{100}$	84	5.79 *13*	4.9 *8*	5.097	5.565	5.284	5.834	7.309	6.118	5.571	3.677
$^{172}_{70}$Yb$_{102}$	78	6.04 *7*	5.2 *9*	5.186	5.554	5.413	5.913	6.705	6.216	6.580	3.876
$^{174}_{70}$Yb$_{104}$	76	5.94 *6*	5.3 *9*	5.025	5.112	5.211	5.681	7.289	5.849	6.008	3.235
$^{176}_{70}$Yb$_{106}$	82	5.30 *19*	4.9 *9*	4.866	4.751	5.048	5.525	6.238	5.573	5.537	3.089
$^{178}_{70}$Yb$_{108}$	84		4.7 *8*	4.659	4.745	4.719	5.399	6.332	5.397	5.034	2.943
$^{180}_{70}$Yb$_{110}$				4.457	4.739	4.514	5.237	6.131	5.095	4.899	2.826
$^{182}_{70}$Yb$_{112}$				4.254	4.361	4.295	5.006	5.458	4.675	4.398	2.605
$^{150}_{72}$Hf$_{78}$				1.653	1.051	0.240		1.535	1.102	1.325	
$^{152}_{72}$Hf$_{80}$				1.335	0.877	0.020	1.258	0.533	0.001	sph.	0.488
$^{154}_{72}$Hf$_{82}$	1513		0.31 *5*	0.973	0.003	0.007	0.007	sph.	0.001	sph.	0.299
$^{156}_{72}$Hf$_{84}$	858		0.53 *9*	1.706	0.064	0.004	0.522	0.444	sph.	sph.	0.338
$^{158}_{72}$Hf$_{86}$	476		0.96 *17*	2.273	0.672	0.370	1.207	1.176	0.914	sph.	0.526
$^{160}_{72}$Hf$_{88}$	389		1.16 *20*	2.880	1.432	1.117	1.729	1.992	1.692	1.144	1.021
$^{162}_{72}$Hf$_{90}$	285	1.35 *12*	1.57 *27*	3.281	2.032	1.851	2.265	2.761	2.409	2.372	1.207
$^{164}_{72}$Hf$_{92}$	211	2.14 *18*	2.10 *37*	3.645	2.790	2.517	2.870	4.158	3.191	2.847	2.202
$^{166}_{72}$Hf$_{94}$	158	3.50 *20*	2.78 *48*	3.954	3.357	3.310	3.893	4.906	4.148	3.794	2.774
$^{168}_{72}$Hf$_{96}$	124	4.30 *23*	3.5 *6*	4.220	4.358	4.241	5.234	5.931	5.122	4.455	3.323
$^{170}_{72}$Hf$_{98}$	100	5.3 *12*	4.3 *7*	4.481	5.184	4.914	5.789	6.853	5.786	6.099	3.660
$^{172}_{72}$Hf$_{100}$	95	4.47 *33*	4.5 *8*	4.738	5.558	5.431	5.821	7.854	6.063	6.276	3.693

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{174}_{72}$Hf$_{102}$	90	4.88 *31*	4.7 *8*	4.825	5.537	5.471	5.589	7.204	5.915	6.984	3.562
$^{176}_{72}$Hf$_{104}$	88	5.27 *10*	4.8 *8*	4.667	5.058	5.196	5.311	7.315	5.320	5.512	3.215
$^{178}_{72}$Hf$_{106}$	93	4.82 *6*	4.5 *8*	4.511	5.033	4.779	5.081	5.786	5.009	5.443	3.098
$^{180}_{72}$Hf$_{108}$	93	4.67 *12*	4.5 *8*	4.307	5.028	4.552	4.878	5.690	4.833	4.885	2.987
$^{182}_{72}$Hf$_{110}$	97		4.2 *7*	4.109	4.665	4.391	4.658	5.432	4.506	4.439	2.838
$^{184}_{72}$Hf$_{112}$	107		3.8 *7*	3.910	4.253	4.136	4.312	4.548	4.139	4.257	2.583
$^{186}_{72}$Hf$_{114}$				3.516	3.952	3.755	3.461	4.303	3.599	3.205	2.277
$^{188}_{72}$Hf$_{116}$				3.012	2.899	3.209	2.774	2.667		2.100	1.945
$^{158}_{74}$W$_{84}$				1.311	0.018	sph.	0.304	0.477	sph.	sph.	0.297
$^{160}_{74}$W$_{86}$				1.823	0.477	0.093	0.877	1.216	sph.	sph.	0.415
$^{162}_{74}$W$_{88}$	450		1.05 *18*	2.381	1.160	0.949	1.324	1.860	1.405	1.092	0.717
$^{164}_{74}$W$_{90}$	331		1.41 *25*	2.755	1.717	1.503	1.766	2.394	2.023	1.919	1.458
$^{166}_{74}$W$_{92}$	251		1.85 *32*	3.096	2.179	2.018	2.308	3.013	2.640	2.397	2.460
$^{168}_{74}$W$_{94}$	199	3.24 *18*	2.32 *40*	3.387	2.999	2.608	4.542	3.382	3.516	2.809	1.809
$^{170}_{74}$W$_{96}$	156	3.51 *10*	2.9 *5*	3.638	3.602	3.379	6.103	5.350	5.448	5.092	2.757
$^{172}_{74}$W$_{98}$	123	5.02 *48*	3.7 *6*	3.885	4.750	4.362	6.589	6.464	6.254	4.057	3.273
$^{174}_{74}$W$_{100}$	113	3.97 *28*	4.0 *7*	4.130	5.171	4.929	6.733	7.467	6.509	5.965	3.438
$^{176}_{74}$W$_{102}$	109		4.1 *7*	4.213	5.134	4.910	6.382	7.326	6.166	5.633	3.200
$^{178}_{74}$W$_{104}$	106		4.2 *7*	4.062	5.119	4.337	5.699	7.437	5.065	7.424	3.094
$^{180}_{74}$W$_{106}$	103	4.25 *24*	4.3 *7*	3.914	4.680	4.223	5.132	5.306	4.676	4.606	3.008
$^{182}_{74}$W$_{108}$	100	4.20 *8*	4.4 *8*	3.720	4.668	3.971	4.739	5.385	4.468	4.520	2.897
$^{184}_{74}$W$_{110}$	111	3.78 *13*	3.9 *7*	3.532	3.956	3.652	4.379	4.481	4.075	4.367	2.695
$^{186}_{74}$W$_{112}$	122	3.50 *12*	3.5 *6*	3.344	3.604	3.392	3.922	4.616	3.729	3.347	2.385
$^{188}_{74}$W$_{114}$	143		3.0 *5*	2.973	3.062	3.067	3.180	2.817	3.243	2.308	1.743
$^{190}_{74}$W$_{116}$	205		2.07 *36*	2.502	2.058	2.414	2.590	2.638	2.404	2.212	1.790
$^{192}_{74}$W$_{118}$				2.062	1.691	1.727	2.104	2.417	1.698	1.488	1.276
$^{194}_{74}$W$_{120}$				1.664	1.826	1.498	1.569	1.618		0.927	0.814
$^{160}_{76}$Os$_{84}$				0.942	0.004	sph.	0.036	0.023	sph.	sph.	0.256
$^{162}_{76}$Os$_{86}$				1.392	0.124	0.010	0.464	1.138	sph.	sph.	0.320
$^{164}_{76}$Os$_{88}$	548		0.90 *16*	1.894	0.751	0.396	0.796	1.532	0.891	sph.	0.428
$^{166}_{76}$Os$_{90}$	430		1.14 *20*	2.235	1.224	1.037	1.050	1.991	1.457	1.163	0.765
$^{168}_{76}$Os$_{92}$	341		1.43 *25*	2.549	1.840	1.536	1.418	2.608	1.963	1.815	1.526
$^{170}_{76}$Os$_{94}$	286		1.68 *29*	2.819	2.066	1.986	1.930	2.903	2.530	2.148	2.355
$^{172}_{76}$Os$_{96}$	227	3.30 *23*	2.10 *37*	3.053	2.639	2.691	6.095	3.217	5.655	2.494	2.082
$^{174}_{76}$Os$_{98}$	158	4.7 *6*	3.0 *5*	3.284	3.919	3.759	6.765	3.905	6.526	5.530	1.919
$^{176}_{76}$Os$_{100}$	135		3.5 *6*	3.514	4.736	4.376	7.045	7.031	6.890	5.780	2.562
$^{178}_{76}$Os$_{102}$	131		3.6 *6*	3.592	4.720	3.991	6.960	6.892	6.822	4.636	2.657
$^{180}_{76}$Os$_{104}$	132	3.6 *8*	3.5 *6*	3.450	4.292	3.682	6.628	4.813	5.561	5.911	2.680
$^{182}_{76}$Os$_{106}$	127	3.86 *35*	3.6 *6*	3.311	4.279	3.555	6.075	4.884	4.749	4.594	2.623
$^{184}_{76}$Os$_{108}$	119	3.23 *16*	3.8 *7*	3.129	3.906	3.438	5.475	4.073	4.416	4.495	2.492
$^{186}_{76}$Os$_{110}$	137	2.90 *10*	3.3 *6*	2.954	3.578	3.100	4.798	2.929	3.637	3.389	2.218
$^{188}_{76}$Os$_{112}$	155	2.55 *5*	2.9 *5*	2.778	2.703	2.831	3.789	3.014	3.056	2.359	1.659
$^{190}_{76}$Os$_{114}$	186	2.35 *6*	2.40 *42*	2.434	1.984	2.474	2.716	2.782	2.444	2.282	1.785
$^{192}_{76}$Os$_{116}$	205	2.100 *30*	2.16 *38*	2.002	1.785	1.885	2.127	2.169	1.934	2.191	1.304

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{194}_{76}$Os$_{118}$	218		2.02 *35*	1.603	1.574	1.420	1.624	1.706	1.403	0.695	0.810
$^{196}_{76}$Os$_{120}$	300		1.46 *27*	1.248	1.584	0.995	1.113	1.003	1.238	sph.	0.526
$^{198}_{76}$Os$_{122}$				0.939	0.636	0.674	0.533	0.466	0.674	sph.	
$^{200}_{76}$Os$_{124}$				0.677	0.260	0.004	0.002	sph.		sph.	
$^{164}_{78}$Pt$_{86}$				1.005		0.001	0.216	0.253	sph.	sph.	0.250
$^{166}_{78}$Pt$_{88}$				1.446	0.302	0.001	0.258	0.892	sph.	sph.	0.295
$^{168}_{78}$Pt$_{90}$	582		0.88 *15*	1.752	0.567	0.260	0.302	1.442	0.665	sph.	0.370
$^{170}_{78}$Pt$_{92}$	509		1.00 *17*	2.036	0.830	0.704	0.060	1.693	1.061	0.244	0.488
$^{172}_{78}$Pt$_{94}$	457		1.10 *19*	2.283	1.172	1.156	0.129	1.719	1.114	1.381	0.736
$^{174}_{78}$Pt$_{96}$	394		1.27 *22*	2.497	1.797	1.661	5.691	2.233	5.705	1.649	1.509
$^{176}_{78}$Pt$_{98}$	263	2.58 *28*	1.88 *33*	2.711	2.316	4.640	6.759	6.452	6.712	5.244	1.679
$^{178}_{78}$Pt$_{100}$	170		2.9 *5*	2.924	5.614	5.406	7.250	6.963	7.181	6.021	1.675
$^{180}_{78}$Pt$_{102}$	152	4.81 *49*	3.2 *6*	2.997	6.084	5.032	7.408	7.631	7.225	5.646	1.613
$^{182}_{78}$Pt$_{104}$	154		3.1 *5*	2.865	5.497	4.382	7.376	7.478	6.442	5.669	1.764
$^{184}_{78}$Pt$_{106}$	162	3.78 *27*	3.0 *5*	2.736	5.052	3.790	7.057	5.220	5.731	5.031	1.756
$^{186}_{78}$Pt$_{108}$	191	2.99 *13*	2.50 *44*	2.568	4.639	3.167	6.578	2.629	5.162	2.589	1.669
$^{188}_{78}$Pt$_{110}$	265	2.69 *49*	1.79 *31*	2.406	1.794	2.840	5.744	2.611	3.855	2.311	1.632
$^{190}_{78}$Pt$_{112}$	295	1.75 *22*	1.60 *28*	2.245	1.623	2.258	3.058	2.648	1.553	1.642	1.237
$^{192}_{78}$Pt$_{114}$	316	1.870 *40*	1.48 *26*	1.931	1.619	1.411	1.883	2.028	1.388	1.263	1.021
$^{194}_{78}$Pt$_{116}$	328	1.642 *22*	1.42 *25*	1.541	1.486	1.275	1.369	1.797	1.261	1.068	0.813
$^{196}_{78}$Pt$_{118}$	355	1.375 *16*	1.30 *23*	1.187	1.335	1.127	1.140	1.057	1.150	sph.	0.626
$^{198}_{78}$Pt$_{120}$	407	1.080 *12*	1.13 *20*	0.879	1.353	0.894	0.728	1.071	0.985	sph.	0.455
$^{200}_{78}$Pt$_{122}$	470		0.97 *17*	0.619	0.561	0.626	0.361	0.033	0.592	sph.	
$^{202}_{78}$Pt$_{124}$				0.406	0.277	0.002	0.001	0.008	sph.	sph.	
$^{204}_{78}$Pt$_{126}$				0.207	0.006	sph.	sph.	sph.	sph.	sph.	
$^{172}_{80}$Hg$_{92}$				1.568	0.595		sph.	0.934	sph.	sph.	
$^{174}_{80}$Hg$_{94}$				1.789	0.706		0.058	1.150	0.793	sph.	
$^{176}_{80}$Hg$_{96}$	613		0.85 *15*	1.984	0.717		0.003	1.168	0.898	sph.	
$^{178}_{80}$Hg$_{98}$	558		0.93 *16*	2.178	0.840		1.203	sph.	1.011	sph.	
$^{180}_{80}$Hg$_{100}$	434		1.19 *21*	2.373	0.988		2.214	sph.	1.104	sph.	
$^{182}_{80}$Hg$_{102}$	351		1.45 *25*	2.440	1.021		2.571	sph.	1.179	sph.	1.001
$^{184}_{80}$Hg$_{104}$	366	2.05 *49*	1.38 *24*	2.319	1.172		3.036	0.720	1.231	0.684	0.788
$^{186}_{80}$Hg$_{106}$	405	1.41 *24*	1.24 *22*	2.201	1.167	1.302	3.209	1.207	1.241	1.192	0.733
$^{188}_{80}$Hg$_{108}$	412		1.21 *21*	2.048	1.184	1.302	2.952	1.225	1.228	1.195	0.425
$^{190}_{80}$Hg$_{110}$	416		1.19 *21*	1.902	1.181	1.198	2.448	1.839	1.184	sph.	0.292
$^{192}_{80}$Hg$_{112}$	422		1.17 *20*	1.756	1.197	1.237	1.738	1.865	1.125	sph.	0.232
$^{194}_{80}$Hg$_{114}$	428		1.14 *20*	1.475	1.190	1.158	1.542	1.097	1.066	sph.	0.201
$^{196}_{80}$Hg$_{116}$	425	1.15 *5*	1.14 *20*	1.130	1.090	1.074	1.341	1.112	1.009	sph.	0.237
$^{198}_{80}$Hg$_{118}$	411	0.990 *12*	1.17 *20*	0.826	1.105	0.899	1.084	1.127	0.968	sph.	0.222
$^{200}_{80}$Hg$_{120}$	367	0.853 *11*	1.30 *23*	0.568	0.965	0.561	0.722	0.523	0.851	sph.	0.249
$^{202}_{80}$Hg$_{122}$	439	0.612 *10*	1.08 *19*	0.360	0.587	0.001	0.327	0.009	sph.	sph.	0.205
$^{204}_{80}$Hg$_{124}$	436	0.427 *7*	1.09 *19*	0.200	0.295	sph.	0.013	sph.	sph.	sph.	0.185
$^{206}_{80}$Hg$_{126}$	1068		0.44 *8*	0.069	0.006	sph.	0.004	sph.	sph.	sph.	0.531

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{208}_{80}$Hg$_{128}$				0.386	0.006	0.003	0.008	sph.	sph.	sph.	0.138
$^{210}_{80}$Hg$_{130}$				0.764	0.062	sph.	0.028	sph.	0.001	sph.	0.158
$^{178}_{82}$Pb$_{96}$				1.364	0.005		sph.	0.032	sph.	sph.	
$^{180}_{82}$Pb$_{98}$				1.529	0.005		sph.	0.033	sph.	sph.	
$^{182}_{82}$Pb$_{100}$	888		0.60 *11*	1.696	0.005		0.001	0.033	sph.	sph.	
$^{184}_{82}$Pb$_{102}$	701		0.76 *13*	1.754	0.007		0.002	sph.	sph.	sph.	0.645
$^{186}_{82}$Pb$_{104}$	662		0.80 *14*	1.650	sph.		0.002	sph.	sph.	sph.	0.437
$^{188}_{82}$Pb$_{106}$	723		0.73 *13*	1.549	sph.	sph.	0.013	sph.	sph.	sph.	0.267
$^{190}_{82}$Pb$_{108}$	773		0.67 *12*	1.419	sph.	0.001	0.059	0.035	sph.	sph.	0.174
$^{192}_{82}$Pb$_{110}$	853		0.61 *11*	1.295	sph.	sph.	0.088	0.036	sph.	sph.	0.136
$^{194}_{82}$Pb$_{112}$	965		0.53 *9*	1.173	sph.	0.006	0.090	0.036	sph.	sph.	0.120
$^{196}_{82}$Pb$_{114}$	1049		0.49 *8*	0.942	sph.	0.002	0.036	0.037	sph.	sph.	0.116
$^{198}_{82}$Pb$_{116}$	1063		0.48 *8*	0.667	sph.	sph.	0.011	0.009	sph.	sph.	0.124
$^{200}_{82}$Pb$_{118}$	1026		0.49 *9*	0.434	sph.	sph.	0.003	0.009	sph.	sph.	0.124
$^{202}_{82}$Pb$_{120}$	960		0.52 *9*	0.251	0.006	sph.	0.002	0.009	sph.	sph.	1.427
$^{204}_{82}$Pb$_{122}$	899	0.1620 *40*	0.55 *10*	0.119	0.006	0.002	sph.	sph.	sph.	sph.	0.110
$^{206}_{82}$Pb$_{124}$	803	0.1000 *20*	0.62 *11*	0.036	0.006	sph.	sph.	sph.	sph.	sph.	0.097
$^{208}_{82}$Pb$_{126}$	4085	0.300 *30*	0.120 *21*	sph.	sph.	sph.	sph.	sph.	sph.	sph.	0.385
$^{210}_{82}$Pb$_{128}$	799	0.051 *15*	0.61 *11*	0.134	sph.	sph.	sph.	sph.	sph.	sph.	0.087
$^{212}_{82}$Pb$_{130}$	804		0.60 *11*	0.389	sph.	sph.	sph.	sph.	sph.	sph.	0.096
$^{214}_{82}$Pb$_{132}$	836		0.58 *10*	0.760	0.008	sph.	0.001	sph.	sph.	sph.	0.104
$^{216}_{82}$Pb$_{134}$				1.041	0.011	sph.	0.001	sph.	sph.	sph.	0.113
$^{218}_{82}$Pb$_{136}$				1.332	0.049	sph.	0.003	sph.		sph.	0.123
$^{188}_{84}$Po$_{104}$				3.293	9.541	8.365	5.345	sph.		sph.	4.002
$^{190}_{84}$Po$_{106}$				3.147	8.057	0.021	3.148	sph.		sph.	1.921
$^{192}_{84}$Po$_{108}$	262		2.08 *36*	2.959	3.445	0.232	3.061	sph.		sph.	0.556
$^{194}_{84}$Po$_{110}$	318		1.70 *30*	2.776	0.066	0.051	2.783	sph.		sph.	0.265
$^{196}_{84}$Po$_{112}$	463		1.16 *20*	2.594	sph.	0.005	2.500	0.899		0.038	0.208
$^{198}_{84}$Po$_{114}$	605		0.88 *15*	2.239	sph.	0.001	2.244	0.464		sph.	0.191
$^{200}_{84}$Po$_{116}$	665		0.79 *14*	1.795	0.008	sph.	0.528	0.342		sph.	0.204
$^{202}_{84}$Po$_{118}$	677		0.78 *14*	1.392	0.008	sph.	0.209	0.238		sph.	0.204
$^{204}_{84}$Po$_{120}$	684		0.76 *13*	1.039	0.008	sph.	0.028	0.010		sph.	0.230
$^{206}_{84}$Po$_{122}$	700		0.74 *13*	0.740	0.032	sph.	0.006	sph.		sph.	0.169
$^{208}_{84}$Po$_{124}$	686		0.75 *13*	0.493	0.032	sph.	sph.	sph.		sph.	0.147
$^{210}_{84}$Po$_{126}$	1181	0.0200 *40*	0.43 *8*	0.260	sph.	sph.	sph.	sph.		sph.	0.545
$^{212}_{84}$Po$_{128}$	727		0.70 *12*	0.779	sph.	sph.	sph.	sph.		sph.	0.142
$^{214}_{84}$Po$_{130}$	609		0.83 *14*	1.311	0.007	sph.	0.038	sph.		sph.	0.161
$^{216}_{84}$Po$_{132}$	549		0.91 *16*	1.955	0.046	sph.	0.022	sph.		sph.	0.181
$^{218}_{84}$Po$_{134}$	511		0.98 *17*	2.402	0.183	sph.	0.173	sph.		sph.	0.207
$^{220}_{84}$Po$_{136}$				2.843	1.730	1.371	0.291	0.011		sph.	0.246
$^{222}_{84}$Po$_{138}$				3.310	2.769	2.190	1.237	2.040		sph.	0.340
$^{194}_{86}$Rn$_{108}$				4.300	4.847	2.658	2.779	19.098		19.712	5.220

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{196}_{86}\mathrm{Rn}_{110}$				4.077	4.611	1.630	2.473	2.114		1.934	0.588
$^{198}_{86}\mathrm{Rn}_{112}$	339		1.65 *29*	3.852	3.985	1.219	2.007	1.302		1.175	0.336
$^{200}_{86}\mathrm{Rn}_{114}$	432		1.28 *22*	3.409	3.696	0.867	1.277	0.759		0.785	0.283
$^{202}_{86}\mathrm{Rn}_{116}$	504		1.09 *19*	2.848	1.046	0.562	0.992	0.625		0.859	0.307
$^{204}_{86}\mathrm{Rn}_{118}$	542		1.01 *18*	2.326	0.750	0.281	0.536	0.506		sph.	0.318
$^{206}_{86}\mathrm{Rn}_{120}$	575		0.95 *16*	1.855	0.197	0.330	0.174	0.256		sph.	0.356
$^{208}_{86}\mathrm{Rn}_{122}$	635		0.85 *15*	1.440	0.070	0.034	0.045	0.042		sph.	0.241
$^{210}_{86}\mathrm{Rn}_{124}$	643		0.83 *15*	1.081	0.071	sph.	0.005	sph.		sph.	0.174
$^{212}_{86}\mathrm{Rn}_{126}$	1273		0.42 *7*	0.713	sph.	sph.	sph.	sph.		sph.	0.605
$^{214}_{86}\mathrm{Rn}_{128}$	694		0.76 *13*	1.496	0.007	sph.	0.001	sph.		sph.	0.195
$^{216}_{86}\mathrm{Rn}_{130}$	461		1.14 *20*	2.222	0.007	sph.	0.005	sph.		sph.	0.229
$^{218}_{86}\mathrm{Rn}_{132}$	324		1.62 *28*	3.057	0.202	0.325	0.269	sph.		sph.	0.272
$^{220}_{86}\mathrm{Rn}_{134}$	240	1.86 *7*	2.16 *38*	3.621	1.851	1.442	0.515	1.456		sph.	0.344
$^{222}_{86}\mathrm{Rn}_{136}$	186	2.37 *16*	2.78 *48*	4.169	3.019	2.318	1.198	2.139		sph.	0.587
$^{224}_{86}\mathrm{Rn}_{138}$				4.741	4.480	3.094	2.579	3.510		2.972	3.074
$^{226}_{86}\mathrm{Rn}_{140}$				5.292	4.901	3.796	4.010	4.607		4.119	5.021
$^{202}_{88}\mathrm{Ra}_{114}$				4.781	4.213	1.677	1.741	5.121		5.250	0.436
$^{204}_{88}\mathrm{Ra}_{116}$				4.101	3.623	1.191	1.249	1.692		1.958	0.478
$^{206}_{88}\mathrm{Ra}_{118}$	474		1.20 *21*	3.460	1.703	0.770	0.778	0.508		0.887	0.477
$^{208}_{88}\mathrm{Ra}_{120}$	520		1.09 *19*	2.871	1.139	0.364	0.334	0.855		0.751	0.626
$^{210}_{88}\mathrm{Ra}_{122}$	603		0.93 *16*	2.341	0.304	0.326	0.104	0.178		sph.	0.355
$^{212}_{88}\mathrm{Ra}_{124}$	629		0.89 *15*	1.869	0.134	sph.	0.007	0.046		sph.	0.224
$^{214}_{88}\mathrm{Ra}_{126}$	1382		0.40 *7*	1.365	0.008	sph.	0.001	sph.		sph.	0.253
$^{216}_{88}\mathrm{Ra}_{128}$	688		0.80 *14*	2.414	0.008	0.001	0.003	sph.		sph.	0.261
$^{218}_{88}\mathrm{Ra}_{130}$	389	1.10 *20*	1.41 *25*	3.334	0.050	sph.	0.053	sph.		sph.	0.324
$^{220}_{88}\mathrm{Ra}_{132}$	178		3.1 *5*	4.361	1.627	1.341	0.383	1.524		sph.	0.431
$^{222}_{88}\mathrm{Ra}_{134}$	111	4.54 *39*	4.9 *9*	5.042	2.784	2.381	0.580	2.704		sph.	1.116
$^{224}_{88}\mathrm{Ra}_{136}$	84	3.99 *15*	6.4 *11*	5.697	4.762	3.610	0.643	3.675		3.297	4.601
$^{226}_{88}\mathrm{Ra}_{138}$	67	5.15 *14*	7.9 *14*	6.375	5.316	4.505	1.400	4.824		4.820	6.896
$^{228}_{88}\mathrm{Ra}_{140}$	63	5.99 *28*	8.3 *15*	7.025	5.922	5.231	3.934	6.159		5.727	9.911
$^{230}_{88}\mathrm{Ra}_{142}$	57		9.2 *16*	7.628	7.114	6.255	5.342	7.693		6.217	10.615
$^{232}_{88}\mathrm{Ra}_{144}$				8.106	8.406	7.555	6.468	8.414		7.141	10.856
$^{234}_{88}\mathrm{Ra}_{146}$				8.376	8.361	7.747	7.376	10.043		8.350	10.709
$^{212}_{90}\mathrm{Th}_{122}$				3.043	0.548	0.488	0.061	0.899		0.676	0.496
$^{214}_{90}\mathrm{Th}_{124}$				2.493	0.303	sph.	0.049	0.048		sph.	0.405
$^{216}_{90}\mathrm{Th}_{126}$	1478		0.39 *7*	1.896	0.008	sph.	sph.	0.012		sph.	0.312
$^{218}_{90}\mathrm{Th}_{128}$	689		0.83 *15*	3.128	0.008	sph.	0.002	0.013		sph.	0.347
$^{220}_{90}\mathrm{Th}_{130}$	373		1.53 *27*	4.184	0.122	0.029	0.020	0.013		sph.	0.474
$^{222}_{90}\mathrm{Th}_{132}$	183	3.01 *32*	3.1 *5*	5.346	2.052	2.251	0.174	2.342		sph.	1.012
$^{224}_{90}\mathrm{Th}_{134}$	98		5.7 *10*	6.112	4.981	3.705	0.326	3.844		3.711	6.392
$^{226}_{90}\mathrm{Th}_{136}$	72	6.85 *42*	7.8 *14*	6.844	5.614	4.965	0.214	5.045		6.296	8.483
$^{228}_{90}\mathrm{Th}_{138}$	57	7.06 *24*	9.6 *17*	7.599	6.323	5.982	4.221	6.442		6.836	10.432

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
${}^{230}_{90}Th_{140}$	53	8.04 *10*	10.4 *18*	8.319	7.672	6.721	6.202	6.518		7.604	11.964
${}^{232}_{90}Th_{142}$	49	9.28 *10*	11.1 *19*	8.987	8.386	8.145	7.355	8.141		8.190	12.511
${}^{234}_{90}Th_{144}$	49	8.0 *7*	11.0 *19*	9.515	9.066	8.555	9.575	8.902		9.173	12.225
${}^{236}_{90}Th_{146}$				9.813	9.014	9.185	10.496	10.625		9.532	12.060
${}^{238}_{90}Th_{148}$				10.070	9.636	9.780	11.427	10.745		10.157	12.051
${}^{222}_{92}U_{130}$				5.028	0.335	0.011	0.006	2.390		sph.	0.869
${}^{224}_{92}U_{132}$				6.317	3.983	3.090	0.028	4.017		3.786	8.346
${}^{226}_{92}U_{134}$	80		7.3 *13*	7.161	5.796	5.128	0.424	5.391		4.539	10.278
${}^{228}_{92}U_{136}$	59		9.9 *24*	7.966	7.336	6.266	5.055	6.879		7.517	11.139
${}^{230}_{92}U_{138}$	51	9.7 *12*	11.2 *20*	8.793	8.102	7.166	7.135	6.960		8.043	12.260
${}^{232}_{92}U_{140}$	47	10.0 *10*	12.1 *21*	9.580	8.938	8.038	8.332	8.506		8.776	12.896
${}^{234}_{92}U_{142}$	43	10.66 *20*	13.1 *23*	10.310	9.638	8.825	10.278	9.302		9.765	13.413
${}^{236}_{92}U_{144}$	45	11.61 *15*	12.6 *22*	10.880	9.582	9.614	11.082	9.408		10.280	13.135
${}^{238}_{92}U_{146}$	44	12.09 *20*	12.6 *22*	11.210	9.506	10.225	11.886	11.453		10.337	13.036
${}^{240}_{92}U_{148}$	45		12.5 *22*	11.490	10.182	10.693	12.774	13.227		11.198	12.982
${}^{242}_{92}U_{150}$				11.650	9.946	10.600	13.212	13.374		11.372	13.002
${}^{244}_{92}U_{152}$				11.790	10.672	10.733	13.226	12.426		11.344	13.157
${}^{232}_{94}Pu_{138}$				9.902	9.425	8.564	8.666	8.880		12.848	14.494
${}^{234}_{94}Pu_{140}$				10.750	10.138	8.968	9.694	9.710		13.066	15.312
${}^{236}_{94}Pu_{142}$	44		13.3 *23*	11.530	10.177	9.863	10.674	9.821		13.346	15.186
${}^{238}_{94}Pu_{144}$	44	12.61 *17*	13.4 *23*	12.150	10.116	10.495	11.420	11.956		11.457	14.959
${}^{240}_{94}Pu_{146}$	42	13.02 *30*	13.7 *24*	12.500	10.705	11.047	12.008	12.090		12.742	14.408
${}^{242}_{94}Pu_{148}$	44	13.40 *16*	13.1 *23*	12.800	10.574	11.522	12.612	13.962		12.318	14.167
${}^{244}_{94}Pu_{150}$	46	13.68 *16*	12.6 *23*	12.980	10.498	11.620	12.839	14.116		12.342	14.098
${}^{246}_{94}Pu_{152}$	44		13.1 *23*	13.130	11.263	11.640	14.267	14.003		12.433	14.191
${}^{248}_{94}Pu_{154}$				13.270	10.175	10.908	13.825	14.155		12.578	14.369
${}^{250}_{94}Pu_{156}$				13.250	9.322	11.001	12.989	11.814		12.598	
${}^{234}_{96}Cm_{138}$				10.940	10.416	9.233	9.388	10.128		11.506	17.172
${}^{236}_{96}Cm_{140}$				11.850	10.433	10.035	10.738	12.331		11.883	17.667
${}^{238}_{96}Cm_{142}$	35		18 *5*	12.680	10.350	10.752	11.732	12.470		14.650	17.569
${}^{240}_{96}Cm_{144}$	38	14.3 *6*	16.1 *35*	13.340	11.272	11.583	12.378	12.610		14.939	16.780
${}^{242}_{96}Cm_{146}$	42		14.5 *25*	13.720	11.210	12.202	13.018	14.563		13.258	16.054
${}^{244}_{96}Cm_{148}$	42	14.67 *17*	14.1 *25*	14.030	12.286	12.537	13.570	14.723		14.155	15.503
${}^{246}_{96}Cm_{150}$	42	14.94 *19*	14.1 *25*	14.220	12.031	12.554	13.750	14.605		14.883	15.312
${}^{248}_{96}Cm_{152}$	43	14.99 *19*	13.8 *24*	14.390	11.874	12.599	15.034	14.763		14.973	15.329
${}^{250}_{96}Cm_{154}$	43		13.9 *29*	14.540	10.727	12.521	14.513	14.922		13.703	15.493
${}^{252}_{96}Cm_{156}$				14.520	10.584	11.983	13.843	14.532		13.726	
${}^{254}_{96}Cm_{158}$				14.010	9.643	12.085	13.167	14.686		11.933	
${}^{240}_{98}Cf_{142}$				13.870	10.725	11.836	11.879	15.009		13.780	19.305
${}^{242}_{98}Cf_{144}$				14.570	11.682	12.549	12.603	15.176		16.208	18.520
${}^{244}_{98}Cf_{146}$	40		15.8 *29*	14.970	12.804	13.327	13.380	15.343		16.497	17.654

TABLE III Predicted Values of $B(E2)\uparrow$ in Units of e^2b^2

See page 15 for Explanation of Tables

Nuclide	E(level) (keV)	Adopted Value	Global Best Fit	SSANM	FRDM	WSM	RMF	ETFSI	HF+BCS SIII	HF+BCS MSk7	DMM
$^{246}_{98}$Cf$_{148}$				15.310	12.538	12.975	14.018	15.511		15.317	16.925
$^{248}_{98}$Cf$_{150}$	41		15.0 *26*	15.510	12.374	13.612	14.108	15.385		15.647	16.599
$^{250}_{98}$Cf$_{152}$	42	16.0 *16*	14.5 *25*	15.680	13.324	13.713	13.778	15.551		16.140	16.533
$^{252}_{98}$Cf$_{154}$	45	16.7 *11*	13.5 *24*	15.840	12.173	13.629	14.871	15.144		16.201	16.576
$^{254}_{98}$Cf$_{156}$				15.820	11.005	13.147	14.412	15.305		13.947	
$^{256}_{98}$Cf$_{158}$				15.280	10.109	12.455	14.025	13.950		13.872	
$^{244}_{100}$Fm$_{144}$				15.840	12.099	13.767		15.976		15.908	
$^{246}_{100}$Fm$_{146}$				16.260	13.055	14.224		15.847		17.036	
$^{248}_{100}$Fm$_{148}$	44		14.8 *37*	16.610	13.110	14.506		16.019		17.130	
$^{250}_{100}$Fm$_{150}$	44		14.7 *31*	16.830	12.851	14.738		16.192		17.211	
$^{252}_{100}$Fm$_{152}$	46		13.8 *24*	17.010	13.816	14.719		15.769		17.279	
$^{254}_{100}$Fm$_{154}$	44		14.2 *25*	17.180	12.762	14.505		15.936		17.324	
$^{256}_{100}$Fm$_{156}$	48		13.2 *23*	17.160	11.523	14.122		16.863		14.983	
$^{258}_{100}$Fm$_{158}$				16.590	11.430	13.391		17.039		14.888	
$^{260}_{100}$Fm$_{160}$				15.990	10.395	12.172		14.067		13.930	

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